

Dandelion Control Public Opinion Research

Final Report

Prepared for The City of Calgary by:

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THE RESEARCH INTELLIGENCE GROUP

Leger

Page 1 of 20



Context & Objectives

Context

Under the Alberta Weed Control Act, dandelions are not considered to be a weed, so there is no provincial requirement to control dandelions. The City takes an integrated pest management approach to manage weeds (including dandelions) through various techniques to encourage healthy grass/turf growth.

In June 2015, a Notice of Motion (NM2015-12) was brought before Council to re-evaluate The City of Calgary's dandelion control policy.

During the 2016 season, The City piloted several alternative dandelion management techniques, to understand the effectiveness, costs and resource requirements for each technique.

The evaluation also required public opinion regarding dandelion control.

Objectives

The objectives of the public opinion survey were to measure citizens' opinions about dandelion control in Calgary, including:

- Overall opinions about the importance of dandelion control on public and private property
- Overall opinions about individual and City responsibility regarding dandelion control
- Awareness of and familiarity with non-traditional methods of dandelion control
- Attitudes and opinions about the pilot techniques
- Communication and education needs



Research Methods

Data Collection

- 500 telephone interviews were conducted with Calgary residents.
- Interviews were conducted between August 15th and August 19th, 2016.

Target Respondents

- Residents of Calgary proper
- Aged 18 or over

Statistical Reliability

- Margin of error is ±4.4%
- Results are weighted by age, gender and city quadrant to ensure accurate representation

Data Analysis & Reporting

- Results from the survey were cross-tabulated to identify notable differences between the following sub-segments of the population.
 - Age
 - Gender
 - Quadrant
 - Communities with Special Tax for Boulevard / Enhanced Landscape Maintenance
 - Homeowners vs. Renters
 - Households with children vs. Households without
 - Households with outdoor pets vs. Households without
 - Satisfaction with the presence of dandelions in the city
- Differences that are significant and meaningful are noted throughout the report.

Page 3 of 20

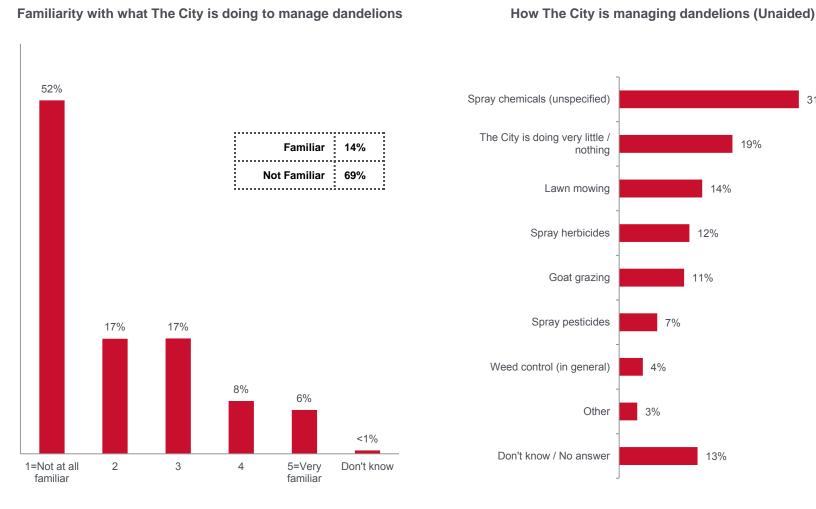
Familiarity with Dandelion Control in Calgary

- Most Calgarians consider themselves unfamiliar with what The City is doing to control dandelions in the city. Calgary homeowners tend to
 rate themselves as more familiar, while renters tend to rate themselves as less familiar.
 - Among the minority who do consider themselves familiar with what The City is doing to control dandelions, the most common perception is that The City sprays chemicals to manage them, followed by the belief that The City does very little or nothing at all to manage them. Those who hold the latter belief tend to be those who are less satisfied with the presence of dandelions in Calgary.
 - Calgarians tend to think that The City does not use cosmetic pesticides, except perhaps in sports fields or major parks throughout Calgary.
 - Citizens are largely unfamiliar with the specific techniques The City uses to control dandelions, with less than half rating themselves familiar with any of the techniques. Familiarity is highest for spraying herbicides (45%) and hand-pulling (45%), followed by having goats eat the dandelions (37%). Awareness of the goats is higher among Calgary females and pet owners.
 - The general lack of familiarity with efforts to control dandelions in Calgary, taken together with the small likelihood for citizens to seek information about dandelion control, suggests a lack of interest in this issue among the majority of the population. Note, however, that there is a small minority who are informed about this topic; and they also tend to be more bothered by dandelions, more dissatisfied with the presence of dandelions and more likely to seek information than those who are less informed. It is this latter group that The City may wish to target with communications.

Calgary

Page 4 of 20

Familiarity with Dandelion Control



Base: Calgarians (n=500)

Calgary

Base: Calgarians familiar with what The City is doing to manage dandelions (n=168) Note: Multiple mentions were allowed.

Q1. How familiar are you with what The City of Calgary is doing to manage dandelions in Calgary? Please use a scale of 1 to 5 where 1=not familiar at all and 5=very familiar. Q2.. What are some things that The City is currently doing to manage dandelions in Calgary, as far as you know?

Dandelion Control Public Opinion Research

31%



Familiarity with Dandelion Control

Perception that The City uses pesticides to control dandelions to improve the appearance of landscaping

Familiarity with various techniques used to control dandelions in Calgary

]			NET (Yes - No)	_	'n	(Fa	NET amiliar – Not familiar)
Sports fields	22%	40%	38%	-2%	Spraying herbicides	34% 19%	45%	12%
	-				Hand-pulling or digging dandelions	43% 1 <mark>1%</mark>	45%	3%
Neighbourhood parks	17%	45%	38%	-7%	Using goats to control dandelions by eating them	48% 149	<mark>%</mark> 37%	-11%
Along boulevards and highway medians	20%	45%	35%	-10%	Spraying non-chemical weed killer	48% 22	2% 28%	-20%
	-				Increasing horticultural practices, such as applying fertilizer or mulch	49% 2	3% 26%	-23%
Major city parks, such as Prince's Island, Stanley Park or Prairie Winds	29%	37%	34%	-3%	Naturalization, or replacing mowed grass with plant species that are native to Calgary and can out-compete dandelions	61%	<mark>16%</mark> 21%	-40%
Playgrounds	20%	53%	28%	-25%	Naturalization, or removing turf grass and replacing with species that could out- compete dandelions	64%	<mark>17%</mark> 18%	-46%
	_				Experimenting with different grasses that tend to be hardier	65%	<mark>16%</mark> 17%	-47%
Natural areas that are not manicured, for example, areas in Nose Hill Park and Edworthy Park	26%	60%	o <mark>15%</mark>	-45%	- Increasing irrigation	68%	<mark>14%</mark> 16%	-53%
■ Don't know	No	Yes			■ Don't know ■Not Fami	liar <mark>N</mark> eutral	Familiar	

Base: Calgarians (n=500)

Q3. To the best of your knowledge, does The City of Calgary use pesticides to control dandelions to improve the appearance of the landscaping in any of the following public spaces? Q8. As you may know, The City is using several different techniques to control dandelions in Calgary. I will read a list of the techniques and ask you to rate your familiarity with each technique on the scale from 1 to 5 where 1=not at all familiar and 5=very familiar.

Page 6 of 20

Calgary

Satisfaction with Dandelions in Calgary

- Satisfaction with the presence of dandelions is divided fairly evenly among dissatisfied (38%) and satisfied (34%) citizens.
- Satisfied citizens tend to either believe that there are "no dandelions" in Calgary, or simply don't mind dandelions. These citizens tend to be younger, and renters. They also are more likely to agree that The City should spend budget on other priorities. They want The City to either keep doing what they've been doing to control dandelions, or do nothing at all. Above all, they want The City to use a method that is least harmful to the environment.
- Dissatisfied citizens, on the other hand, believe that dandelions are "everywhere" in Calgary, and specifically in parks and public spaces. This group tends to be older, retired, and homeowners. They are also more likely to agree that dandelion is a weed that should be controlled, and that dandelions are a problem on properties adjacent to their own. They want to see The City be more proactive about dandelion control, and to "spray more" in general. This group of dissatisfied citizens is divided on which method The City should use to control dandelions, with roughly equal proportions who prioritize "most effective at reducing dandelions" (37%) and "least harmful to the environment" (35%), with the remainder looking for the "most cost-effective" method (24%).
- There is a notable proportion of Calgarians who are dissatisfied with the presence of dandelions in the city, and it will be important for The City to focus on this group's most pressing concern, which is the presence of dandelions on or near their own property. It will also be important for City communications to emphasize any techniques that The City is using that are both environmentally friendly, and effective at reducing dandelions.

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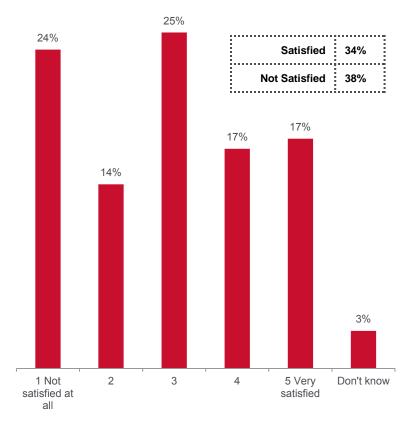


Satisfaction with Dandelion Control

Satisfaction with the presence of dandelions in Calgary

Reasons for satisfaction / dissatisfaction*

Page 8 of 20



		Satisfied	Neutral	Not Satisfied
	n=	152	125	210
Dandelions are everywhere		4%	22%	56%
There aren't any dandelions		47%	20%	1%
I don't mind/care		26%	17%	2%
Some areas better controlled than others		3%	12%	2%
They're in parks/public spaces		1%	9%	16%
City is doing their best		13%	8%	2%
More needs to be done		2%	7%	10%
Do not use pesticides/herbicides		9%	6%	2%
Not informed enough		1%	6%	1%
City isn't doing enough/anything		-	5%	13%
Looks aesthetically terrible		-	4%	10%
Seeds blow into my lawn		1%	2%	14%
Should be left to grow naturally		4%	2%	<1%
I eradicate dandelions myself / I do it mysel	f	<1%	1%	10%
Don't know / No answer		2%	6%	4%

Top mentions

Base: Calgarians (n=500)

*Base: Calgarians who rated their satisfaction with the presence of dandelions in the city

*Mentions less than 2% at neutral rating are not shown / Multiple mentions were allowed

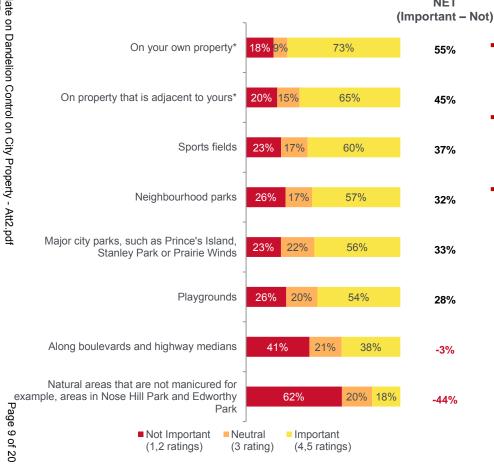
Q4. Whether or not you know what The City of Calgary is doing to control dandelions, how satisfied are you with the presence of dandelions in Calgary?

Q5. What is the reason for your rating? 03/10/2016



Importance of Dandelion Control

Importance of dandelion control in various areas of the city...



- NET
 - Most Calgarians feel that dandelion control is important on their own property, and on property adjacent to their own. This sentiment is stronger among older citizens and those who are dissatisfied with the presence of dandelions in the city.
 - Many citizens also think that dandelions should be controlled in areas like sports fields, neighbourhood parks, major city parks and playgrounds. Pet owners are less likely to consider it important to control dandelions in neighborhood parks.
 - Calgarians are divided as to whether or not dandelion control is necessary along roadways; while on the other hand they do not think that dandelion control is important in natural areas such as Nose Hill Park and Edworthy Park.

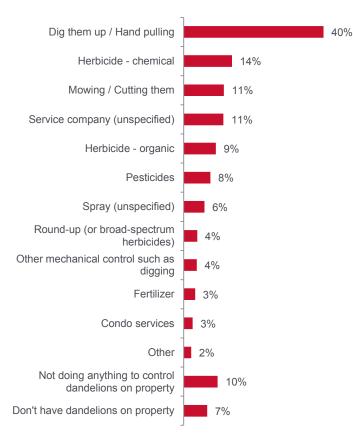
*Only asked to home owners (n=423)

Q6. How important is it for you that dandelions are controlled in each of the following areas of the city



Personal Steps Taken to Control Dandelions

Actions taken by homeowners to control dandelions



- Most Calgarian homeowners are doing something to control dandelions on their property, most commonly digging them up by hand.
- Herbicides, mowing, pesticides and unspecified spraying are common among approximately one-in-ten households; while roughly the same proportion controls dandelions through a third-party contractor.
- About one-in-ten Calgary homeowners do nothing to control dandelions on their property.

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Base: Calgarians who are homeowners (n=423)

Mentions less than 2% are not shown / Multiple mentions allowed

Q7. Some homeowners take steps to control dandelions on their property and others do nothing at all. What is your household doing to control dandelions on your own property?



Acceptability of Methods to Control Dandelions

NET

Acceptability of various techniques used to control dandelions...

		(Ac	ceptable – Not)
Naturalization, or replacing mowed grass with plant species that are native to Calgary and can out- compete dandelions (n=185)	8%	87%	83%
Using goats to control dandelions by eating them (n=273)	<mark>9%</mark> 9%	82%	73%
Naturalization, or removing turf grass and replacing with species that could out-compete dandelions (n=171)	- 5 <mark>%14%</mark> -	80%	75%
Experimenting with different grasses that tend to be hardier (n=171)	<mark>16%</mark>	79%	76%
Increasing horticultural practices, such as applying fertilizer or mulch (n=243)	5 <mark>%19%</mark>	75%	70%
Spraying non-chemical weed killer (n=254)	11% 22%	67%	56%
Hand-pulling or digging dandelions (n=270)	<mark>16%</mark> 17%	66%	50%
Increasing irrigation (n=141)	10 <mark>% 33%</mark>	56%	46%
Spraying herbicides (n=323)	36%	<mark>26%</mark> 37%	1%
 Don't know Not Acceptable (1,2 ratings) 	 Neutral (3 rating) 	Acceptable (4,5 ratings)	

• With one notable exception, all of the proposed techniques to control dandelions are very acceptable to Calgarians.

- The most acceptable techniques are the naturalization techniques; having goats eat the dandelions; and experimenting with different, hardier grasses.
- The least acceptable technique is spraying herbicides, which is not acceptable to just over one-third of citizens.
- When forced to choose the best among all nine techniques presented, citizens choose spraying non-chemical weed killer, using goats to control dandelions, and spraying herbicides (shown on the following page).
- Note that spraying herbicides is the least acceptable method, yet it is still preferred (particularly among those dissatisfied with dandelions in Calgary). This may be because of greater familiarity with the technique, the belief that this is what The City is already doing, and the perceived effectiveness of this method.
- Above all, Calgarians want The City to use a method that is least harmful to the environment (shown on the following page). Taken together with other findings in the study, the most promising techniques in public opinion may still be naturalization and using non-chemical weed killer. The challenge for The City will be to make citizens more familiar with these techniques and their effectiveness.

Base: Calgarians who are familiar with the techniques

Q9. I will re-read the techniques to control dandelions that you're familiar with, and this time please rate how acceptable each one is, using the scale from 1 to 5 where 1=not at all acceptable and 5=very acceptable.

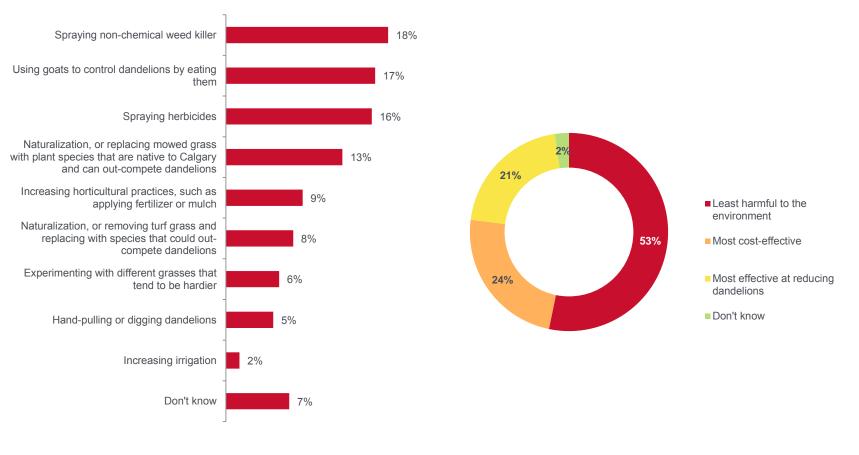
Page 11 of 20



Preferred Approach to Control Dandelions

The one technique The City should focus on to control dandelions in Calgary...

The main priority The City should have when selecting a method to control dandelions



Base: Calgarians (n=500)

*Base: Calgarians who rated any techniques as acceptable (n=445)

Q10. And in your opinion, which one technique should The City focus on to control dandelions in Calgary... / Q12. When selecting a method to control dandelions, which of the following should be The City of Calgary's main priority? Should it be choosing the method that is...

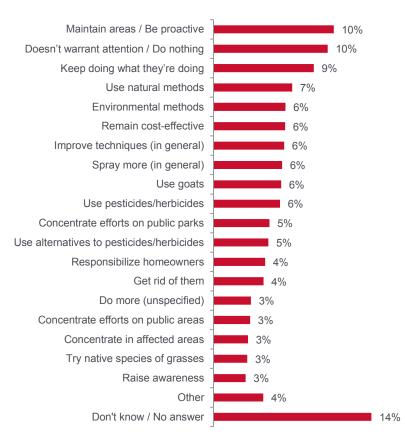
03/10/2016



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Recommended Approach to Control Dandelions

Citizens' Opinions of what The City should do to control dandelion growth in Calgary



- Citizens offer various opinions on what The City should do to control dandelion growth in Calgary, with no single method coming through strongly.
- Over one-in-ten Calgarians provide no recommended approach to control dandelions, while the most common suggestions are generic, such as "be proactive," "keep doing what you're doing," and "don't do anything." These are all further evidence that dandelion control is not a priority for the general public.
- The more specific comments echo some of the other findings in the study, and relate to using environmentally friendly techniques, or focusing on specific areas in the city.

Base: Calgarians (n=500)

Mentions less than 3% are not shown

Q13. Some citizens are concerned about dandelions in Calgary while others are not bothered by them. Knowing this, what do you think The City should be doing to control dandelion growth in Calgary?

Page 13 of 20

Calgary

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Attitudes toward Dandelions

- Attitudes toward dandelions are mixed, with further analysis suggesting that dandelions are more tolerable among younger Calgarians, renters, and those who prefer that The City use techniques that are least harmful to the environment. There are no notable differences among other subgroups.
- Calgarians demonstrate several attitudes that suggest dandelions are problematic.

Calgarians tend to agree:	Calgarians tend to disagree:
 Dandelion is a weed that should be controlled 	 Pesticides used solely to improve the appearance of lawns and other landscaping should be phased out in Calgary private property
	 It's a waste of time and taxpayer money trying to control dandelions in Calgary
	 I'm not really bothered by the appearance of dandelions in my own yard
	 I wouldn't be bothered by the appearance of dandelions in my neighbour's yard

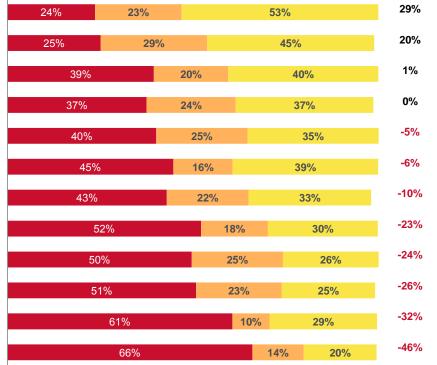
• At the same time, Calgarians hold some attitudes which suggest dandelions are not a problem:

Calgarians tend to agree:	Calgarians tend to disagree:
 I would rather see The City of Calgary spend budget on other 	 Dandelions are a problem on my property
priorities, rather than dandelion control	 Dandelions are a threat to the usability of Calgary's parks and open spaces

Attitudes toward Dandelions







Dandelion is a weed that should be controlled I'd rather see The City spend budget on other priorities, rather than dandelion control I'm not really bothered by the appearance of dandelions around Calgary Pesticides used solely to improve the appearance... should be phased out in Calgary Dandelions are a threat to the beauty of Calgary's parks and open spaces Dandelions are a problem on properties near mine* Pesticides used solely to improve the appearance... should be phased out in Calgary private property I wouldn't be bothered by the appearance of dandelions in my neighbour's yard* It's a waste of time and taxpayer money trying to control dandelions in Calgary Dandelions are a threat to the usability of Calgary's parks and open spaces I'm not really bothered by the appearance of dandelions in my own yard*

> Disagree Neutral (1,2 ratings) (3 rating)

eutral Agree rating) (4,5 ratings)

Base: Calgarians (n=500)

*Only asked to home owners (n=423)

Don't know responses are not shown

Q11. For each statement please tell me how much you agree or disagree using the scale where 1=do not agree at all and 5=completely agree.



Attitudes toward Dandelions

by AGE

		Total (n=500)	18-24	25-34	35-44	45-54	55-64	65-74	75+
(% disagree - agree)	Dandelion is a weed that should be controlled	-29%	-4%	-12%	-32%	-38%	-30%	-55%	-73%
	Dandelions are a threat to the beauty of parks and open spaces	5%	16%	18%	-2%	16%	-6%	-25%	-13%
	Dandelions are a problem on my property	46%	53%	62%	39%	45%	40%	43%	39%
	Dandelions are a problem on properties near mine	6%	38%	37%	2%	-15%	3%	-6%	-28%
	Dandelions are a threat to the usability of parks and open spaces	26%	39%	36%	25%	20%	13%	16%	31%
(% agree - disagree)	I'd rather see budget spent on other priorities, than dandelion control	20%	49%	44%	27%	10%	-6%	-14%	-11%
	Pesticides used solely to improve the appearance should be phased out in Calgary public property	0%	-1%	3%	7%	-2%	-11%	-14%	19%
	Pesticides used solely to improve the appearance should be phased out in Calgary private property	-10%	8%	-2%	2%	-21%	-18%	-39%	-7%
	It's a waste of time and taxpayer money trying to control dandelions in Calgary	-24%	1%	-15%	-18%	-34%	-35%	-43%	-39%
	I'm not really bothered by the appearance of dandelions around Calgary	1%	25%	26%	6%	-14%	-19%	-22%	-35%
	I'm not really bothered by the appearance of dandelions in my own yard	-32%	-6%	-13%	-24%	-51%	-42%	-39%	-43%
	I wouldn't be bothered by the appearance of dandelions in my neighbour's yard	-23%	8%	-23%	-4%	-39%	-31%	-26%	-36%
	AVERAGE*	-1%	19%	13%	2%	-10%	-12%	-19%	-16%

*AVERAGE is calculated as the average NET agreement with positive attitudes toward dandelions. NETs for problem statements were reversed. Q11. For each statement please tell me how much you agree or disagree using the scale where 1=do not agree at all and 5=completely agree.





by OWNERS, PREFERRED METHOD TO CONTROL, LIKELY TO SEEK INFO

		Total (n=500)	Own	Rent	Least harmful to enviro	Most cost- effective	Most effective	Likely	Not likely
(% disagree - agree)	Dandelion is a weed that should be controlled	-29%	-35%	-4%	-6%	-41%	-74%	-62%	-13%
	Dandelions are a threat to the beauty of parks and open spaces	5%	-1%	32%	27%	-5%	-40%	-20%	16%
	Dandelions are a problem on my property	46%	46%	0%	60%	38%	24%	19%	57%
	Dandelions are a problem on properties near mine	6%	6%	0%	22%	5%	-29%	-26%	21%
	Dandelions are a threat to the usability of parks and open spaces	26%	22%	39%	41%	32%	-16%	-15%	44%
(% agree – disagree)	I'd rather see budget spent on other priorities, than dandelion control	20%	14%	45%	40%	22%	-32%	-21%	38%
	Pesticides used solely to improve the appearance should be phased out in Calgary public property	0%	-6%	23%	25%	-17%	-44%	-8%	0%
	Pesticides used solely to improve the appearance should be phased out in Calgary private property	-10%	-18%	23%	14%	-29%	-49%	-20%	-6%
	It's a waste of time and taxpayer money trying to control dandelions in Calgary	-24%	-32%	9%	-8%	-19%	-69%	-55%	-11%
	I'm not really bothered by the appearance of dandelions around Calgary	1%	-8%	40%	23%	-8%	-47%	-22%	16%
	I'm not really bothered by the appearance of dandelions in my own yard	-32%	-32%	0%	-18%	-29%	-65%	-50%	-20%
	I wouldn't be bothered by the appearance of dandelions in my neighbour's yard	-23%	-23%	0%	-5%	-26%	-60%	-47%	-13%
	AVERAGE*	-1%	-5%	17%	18%	-6%	-42%	-27%	11%

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Calgary

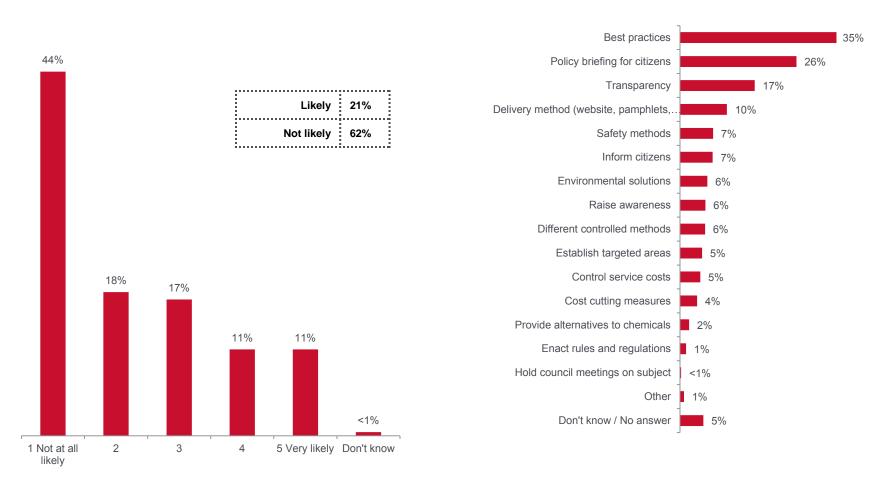
AVERAGE is calculated as the average NET agreement with positive attitudes toward dandelions. NETs for problem statements were reversed. Q11. For each statement please tell me how much you agree or disagree using the scale where 1=do not agree at all and 5=completely agree.





Likelihood to look for information about dandelion control in Calgary

Type of information needed / sought



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Base: Calgarians (n=500)

*Base: Calgarians who are likely to look for information about dandelion control / Multiple mentions allowed

Q14. How likely are you to look for information about dandelion control in Calgary? / Q15. What type of information would you be looking for?



Demographics

	n=500		n=500		n=500
Gender		Number of People in Household		Household Composition	(n=426
Male	50%	1	14%	Under 10 years of age	27%
Female	50%	2	31%	10 and 17 years of age	21%
		3	20%	18 and 65 years of age	92%
Age		4	22%	Over 65 years of age	14%
18 to 24	11%	5	9%		
25 to 34	22%	6	2%	Education	
35 to 44	20%	7	1%	Less than high school	2%
45 to 54	20%	8	<1%	Graduated high school	19%
55 to 64	13%	9	<1%	Graduated college, technical or vocational school	24%
65 to 74	9%	10	<1%	Graduated university	54%
75 years of age or older	4%	Prefer not to answer	1%	Prefer not to answer	2%
Employed by The City		Income		Dwelling Type	
Yes	4%	<\$20,000	3%	House	75%
No	96%	\$20,000 and \$29,999	5%	Duplex	6%
		\$30,000 and \$49,999	7%	Four-plex	<1%
Have a Lawn or Yard		\$50,000 and \$79,999	14%	Apartment	2%
Yes	87%	\$80,000 and \$119,999	19%	Condo	8%
No	13%	\$120,000 or more	29%	Townhouse	6%
		Prefer not to answer	23%	Other	3%
Own a Pet					
Yes	43%	Quadrant		Own or Rent Property	
No	57%	Northeast	20%	Own	81%
		Northwest	25%	Rent	19%
Voted in (yes)		Southeast	24%		
Federal election	83%	Southwest	31%	Employment Status	
Provincial election	80%			Working full time	54%
Municipal election	70%	Place of birth		Working part time	9%
		Born in Canada, or	77%	A student	4%
		Born outside Canada	22%	Not working outside the home	13%
		Prefer not to answer	1%	Retired	17%
				No answer	2%

*Among with more than 1 person in the household

Page 19 of 20



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