Coyote Perception Survey: Summary Report

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The survey was published on March 22nd and closed on April 7th, 2021. A total of 306 responses were received and the resulting data was compiled and summarized using Qualtrics software and Microsoft Excel. Statistical summaries for survey data were collected using Qualtrics automatic data reports. Figures were generated using Qualtrics and Google Sheets.

Demographics

- Our sample population (n=306) was evenly distributed by age, with 87% (n=260) of respondents being between the ages of 18-64.
- The majority of respondents had a bachelor's degree (39%, n=116) as their highest level of education.
- Most of our respondents self-identified as Female (74%, n=220), 23% (n=69) as Male, and 1% (n=4) as Genderqueer/Non-Binary.
- In terms of residency, 84% (n=248) of respondents have lived in Canada for more than 7 years.

Objective 1: revisit the results of Webber's 1997 survey that most inform CwC program directives, to see if and how public perceptions and priorities have changed

Table 1. Summary table comparing survey results for select questions, between the Webber 1997 survey and our 2021 survey. Results are shown in percentages.

Survey Question	1997 Survey	2021 Survey	
Q7 - Are you aware that there are coyotes in the Greater Vancouver Regional District?	Yes = 82% (n=184)	Yes = 98.5% (n=270) No = 1.46% (n=4)	
Q10 - Are you willing to modify or further modify your lifestyle to maintain or enhance wildlife activity within the city?	Yes = 90% (n=68)	Yes = 88.19% (n=239) No = 11.81% (n=32)	
Q26 - Have you ever left food outside for your animal/pet?	Yes = 20% (n=74)	Yes = 5.38% (n=5) No = 94.62% (n=88)	
Q19 - What do you believe is the best method for addressing human-coyote conflicts?	Relocation = 44% (n=92) Lethally Remove = 8% (n=17) Education = 39% (n=82) Other / Combination = 9% (n=20)	Relocation = 15.93% (n=43) Lethally Remove = 4.44% (n=12) Public Education = 68.52% (n=185) Other = 11.11% (n=30)	

In Table 1, we compared the results of specific questions taken directly from Webber (1997) to gauge differences between 1997 and 2021. We found that 99% (n=270) of our respondents were aware that there are coyotes in the Vancouver area, compared to 82% (n=184) in 1997. There was no meaningful change in willingness to modify lifestyles to maintain or enhance wildlife activity within the city, from 90% (n=68) in 1997 to 88% (n=239) in 2021. (Table 1). When respondents were asked what they believed to be the best method for addressing human-coyote conflicts, 16% (n=43) said relocation, 4% (n=12) lethal removal, 69% (n=185) said public education. Compared to 1997, where those choices were 44% (n=92), 8% (n=17) and 39% (n=82) respectively.

Would you agree that the lethal removal/killing of a coyote is an appropriate management strategy for each of the following encounters?

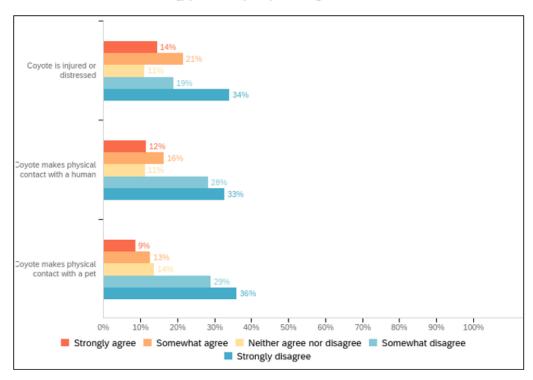


Figure 1. Responses from survey question #20: Levels of agreement with the statement: "lethal removal/killing of coyotes is an appropriate management strategy" for encounters of coyotes that are injured or distressed, coyotes that have physical contact with humans and coyotes that have physical contact with a pet. Agreement levels were rated on a 5-point Likert scale: 'Strongly agree, 'somewhat agree', 'neither agree nor disagree', 'Somewhat disagree' and 'Strongly disagree'.

Many comments we received regarding management methods were specific to Stanley Park, and some respondents felt passionate about removing coyotes entirely from this area. In order to see how the public feels about using lethal control methods on coyotes and if public opinion changed since 1997, we asked if respondents would agree that the lethal removal/killing of a coyote is an appropriate management strategy, for three different coyote encounters (Figure 1). We plotted respondent's level of agreement for each scenario on a 5-point Likert scale, ranging from strongly agree to Strongly disagree. In general, we see that respondents tended to somewhat or strongly disagree with using lethal control methods for all three coyote encounters mentioned. (Figure 1)

In regards to coyotes in the Greater Vancouver Regional District, please rate your level of concern for each of the following: Personal Safety, Children's Safety, Pet Safety, Property Damage.

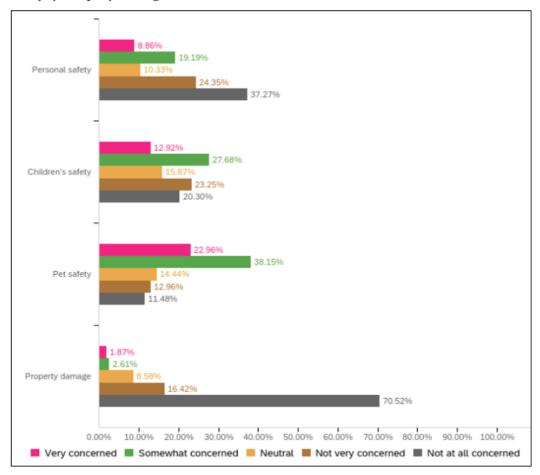


Figure 2. Responses from survey question #9: levels of concern towards coyotes, in regard to 'Personal safety', 'Children's safety', 'Pet safety', and 'Property damage'. Concern levels were rated on a 5-point Likert scale: 'very concerned', 'somewhat concerned', 'neutral', 'not very concerned' and 'not at all concerned'.

We asked respondents to rate their level of concern regarding coyotes, for 4 different categories in regard to coyotes: personal safety, pet safety, children's safety, and property damage. We then plotted the respondent's level of concern for each scenario on a 5-point Likert scale, ranging from Very concerned to Not at all concerned (Figure 2). Looking at the responses, we see, for the most part, respondents were much less concerned with property damage, as 86.94% (n=233) were not very, or not at all concerned. We also see that respondents showed the highest levels of concern towards Pet Safety, where 61.11% (n=165) were very or somewhat concerned (Figure 2). In comparison: the 1997 survey did not find any significant differences in levels of concern between the same 4 categories.

Objective 2: Analyze the effectiveness of the Coexisting with Coyotes program (CwC) (educational awareness and willingness)

The second objective was to test whether the implementation of Stanley park ecology societies coexisting with the coyote's program was effective in bringing public education to the greater Vancouver regional district. The program itself set out to inform the public about how to better interact with coyotes and attempted to make this information more accessible to the general public; these question responses analyze the effectiveness of the program.

Q11 Have you received any information or education on how to coexist with coyotes and/or act during coyote encounters? Q19 What do you believe is the best method for addressing human-coyote conflicts?

Q 11 percent	Q 11 Response	Q 19 Response	Count	Particip. Range
	Yes	relocation	27	
	Yes	education	137	
73.06%	Yes	lethal methods	10	
26.94%	No	relocation	16	
	No	education	48	
	No	lethal methods	2	

Table 2. The table represents the relationship of responses between questions 11 and 19. This is shown through the sum of respondents for all six outcomes of possible responses, as shown in row 3 particp. count. The participant range represents the degree of respondents in relation to the total amount of respondents to the questions.

Table 2 exemplifies the different responses of questions 11 and 19 question 11 asked whether or not the participant had received any information or education regarding coexisting in the past and question 19 asked what methods the participant thought were the best for dealing with coyote encounters. The majority of participants had received information on coexisting with coyotes, which shows that the majority of the population claims to be educated on the topic. Most people believed that education was the best method for dealing with coyotes regardless of whether or not they had been educated on the topic. Something to note about this table is that question 19 did have another option in which people could describe some other thoughts on methods. Most people who responded believed that education and relocation were both possible methods depending on the situation or whether the coyote showed aggression. Other responses to note were fines and penalties towards humans feeding or trying to lure/interact with coyotes.

What was the source from where you gained information or education on how to coexist with coyotes and/or act during coyote encounters? Check all Apply.

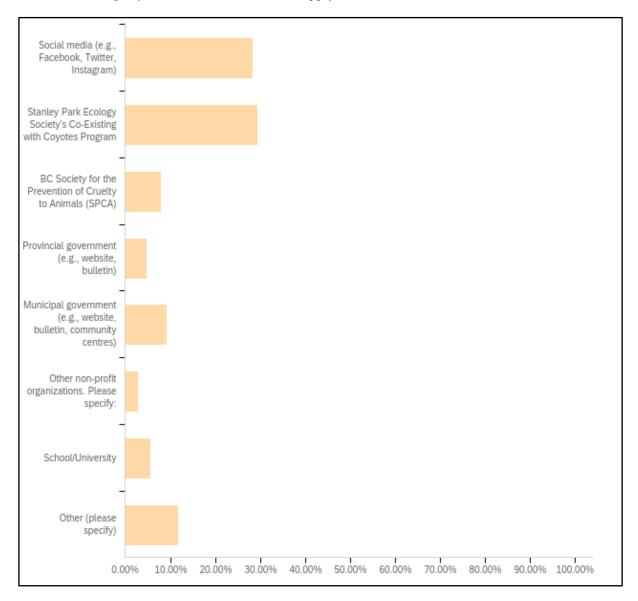


Figure 3. The graph represents the sum of responses to each answer choice of question 12 in percentages. In this question, respondents could pick multiple answers. All responses for this question were from people that said "yes" to question 11, A total of 198 people responded to this question. The sum of responses does not equal the sum of respondents.

Of the people that had answered yes to having received information or education regarding coyotes, the majority of people claimed to have received it from the Coexisting with Coyotes (CwC) program or social media. Social media has a big impact on the information people are receiving but also the coexisting coyote program has shown to have a significant impact on community education on the topic. 57.51% of participants gained information from social media and/or Coexisting with the Coyote program.

The majority of people do not report sightings either because they do not believe it to be an issue, do not know how to report it, or are afraid of what may happen if they report it. 88.19% of participants said that

they would be willing to modify their lifestyles to enhance wildlife which shows that the majority of people are willing to do more to help coexist with surrounding wildlife however may not necessarily act on it.

Objective 3: See if pet owners have adapted their pet care routines with co-existence with coyotes in mind

Of the 93 respondents that said they have pets: most people (72%, n=67) reported to have made adaptations to their pet routines in consideration of urban coyotes. The majority (73%, n=68) of respondents don't allow their pets to go outside without supervision, and also don't leave food outside for their pets (95%, n=88). During the day, 50% (n=46) of respondents let their pets off-leash during walks. On the other hand, at night, only 9% (n=8) of pet owners that walk their pets let them off-leash.

Objective 4: Assess public comfort, implementation and effectiveness of hazing coyotes

Most respondents (66.0%, n=186). said they have never tried to scare off a coyote (i.e. hazing). Of the respondents that said they have hazed a coyote, 85% (n=82) of respondents said that the coyote left the premises afterwards due to hazing. Only 11% (n=11) did not leave and 4% (n=4) answered that the coyote left, but for reasons other than hazing. As shown in Figure 4, 80% (n=227) of respondents said they would be somewhat or extremely comfortable practicing hazing methods on coyotes.

How comfortable would you feel using hazing methods towards a coyote?

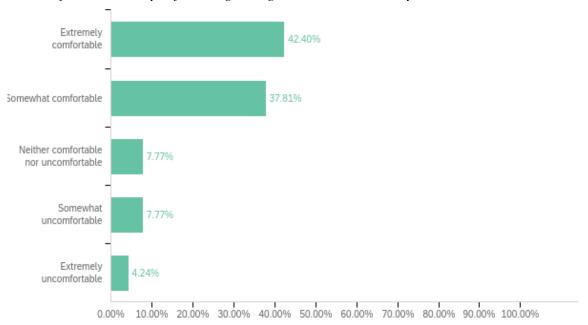


Figure 4. Level of comfort the respondents chose they would have of using hazing methods to scare off a coyote if they saw one (n=283).