



URBAN DEER COUNTS AND CITIZEN SURVEY RESULTS

Issue

The results from the 2018 Urban Deer Counts and Citizen Survey are provided for Council's review.

Motion Proposed by Administration

That the Urban Deer Counts and Citizen Survey Results be received as information and Administration be directed to perform an impact analysis to undertake future deer counts utilizing dedicated resources.

Report, Analysis and Financial Implications

In recent years, the subject of urban deer has come up more frequently, as more citizens express concern regarding property damage and safety concerns over potential human-deer conflict. To better assess urban deer issues, a deer count and citizen survey were conducted in 2015. To collect further data to establish baseline populations, additional deer counts were undertaken in 2018 along with another citizen survey to understand citizen's attitudes towards deer and if those attitudes have changed.

The method for counting deer in 2015 utilized about 100 volunteers to walk each census area in Town within a one hour period on September 15 from 10:30 to 11:30 a.m. and record sightings of does, bucks, and fawns (current year's offspring).

As sourcing large volunteer groups is challenging, a new method was sought for the 2018 counts. A free mobile app, NatureLynx, was utilized inviting the general public to engage and participate in the counts. Parks staff also participated in the counts while performing their general duties in the field. Time of year and time of day was repeated to be similar for comparability to previous count data and to attract public participation. Hardcopy forms were also provided and accepted for those people who did not wish to use the app. The selected one hour count periods were Friday, September 14th from 1:00 to 2:00 p.m. and Sunday, September 16th from 10:00 to 11:00 a.m. A communications plan was developed to promote participation in the counts and citizen survey through a variety of media.

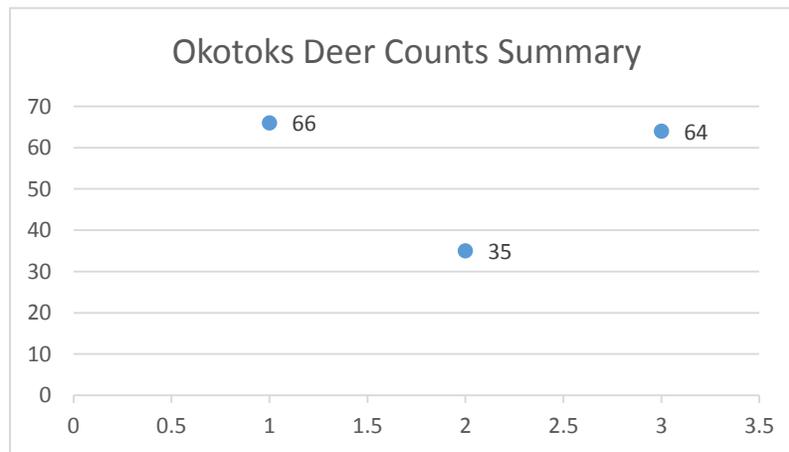
In 2015, a total of 66 deer were reported. In 2018, the counts reported 35 and 64 deer. Many more deer were reported during the Sunday count period, although this was not likely due to higher participation because the same number of participants reported sightings during both the Friday and Sunday count periods. Compared to 2015, fewer does and more fawns were sighted, while buck sightings were similar. More sightings were reported in natural areas and residential areas, while fewer were reported in the annexation area.

Summary of 2015 and 2018 Count Data

	2015 – Sept 15	2018 – Sept 14	2018 – Sept 16
Doe	42	18	27 ↓
Buck	6	5	5
Fawn	18	9	23 ↑
Unknown	0	3	9
Total	66	35	64
Fawn/doe ratio	0.43	0.5	0.85
Buck/doe ratio	0.14	0.63	0.18

The location distribution of sightings were as follows:

	2015 – Sept 15	2018 – Sept 14	2018 – Sept 16
Natural Areas (in River Valley)	42%	63%	67% ↑
Residential or Commercial Area	12%	36%	30% ↑
Manicured Area	14%	<1%	3%
Annexation Area or slightly outside town boundary	32%	0	0 ↓



Using a web-based app in 2018 was an opportunity for citizens to engage in the deer count. Although a comprehensive communications plan was implemented, only 10 people accepted the invitation to participate in the count and only nine participants reported deer in the count. As the app is free and accessible to everyone, it is possible that more people participated, but did not RSVP and/or observe deer. The relatively low participation may suggest that overall citizen concern around deer is relatively low.

Although there are many differing opinions on when the best time to perform counts is, being consistent is most important so data is more comparable. September was selected based on advice from wildlife experts as the bucks have antlers this time of

year and are more easily distinguished from does by inexperienced observers. Normal daylight hours were selected to best attract volunteers. The use of a mobile app with a public interface was very beneficial in allowing easy collection of GPS coordinates and images and transparency of count data.

In summary, due to low volunteer participation, it will be difficult for the Town to improve the consistency and quality of deer count data moving forward without dedicating staff or contracted resources.

Citizen Survey

The 2018 citizen survey on urban deer was largely a repeat of questions asked in 2015. A total of 380 respondents completed the survey in 2018, down from 1,145 in 2015. The survey questions were designed to capture citizens' attitudes and experiences with urban deer. The full surveys can be viewed at Okotoks.ca. Below is a comparison of responses from similar questions.

Question	2015 Responses (total was 1,145)	2018 Responses
Do you have a problem with deer damaging your yard and garden?	14% reported damage they wished to be resolved; 82% felt residents need to make compromises to share the Town with the deer.	30% reported damage they wished to be resolved; 42% love having the deer in their yard and do not mind the damage they do.
How would you describe your feeling of safety in the presence of deer?	12% felt unsafe.	23% feel unsafe.
Have you used deer deterrent strategies in your yard such as chemical repellents, fencing, deer-resistant plantings, motion sprinklers, etc.?	22% had tried strategies.	40% have tried strategies.
Are you aware the Town of Okotoks has a bylaw that prohibits feeding wildlife?	85% indicated they were aware.	90% are somewhat aware to very aware.
Would you participate in a scheduled deer count using a free app while walking around parks, natural areas, etc.?	44% indicated they were willing to participate.	21% indicated they are willing to participate.

Based on the comparative responses to similar questions, a higher proportion (30% versus 14%) of survey respondents reported damage to yards and gardens, and proportionately more have tried deer deterrent strategies (40% up from 22%).

Awareness of the bylaw prohibiting feeding of wildlife remained high at 90%, up from 85%. A higher proportion (23% versus 12%) have some safety concerns in the presence of deer. The desire to participate in deer counts dropped from 44% in 2015 to 21% in 2018.

Due to higher concerns with human deer conflict, a greater emphasis on public communications around deer deterrent strategies and personal safety in the presence of deer should be implemented. The Town will work with the Province to improve and enhance messaging to citizens.

Operational strategies to reduce fruit for deer on public lands should be considered and implemented where feasible.

Strategic Plan Goals

<input type="checkbox"/>	Manage Community Growth	<input type="checkbox"/>	Provide Strong Governance
<input type="checkbox"/>	Provide Quality Community Infrastructure	<input checked="" type="checkbox"/>	Healthy and Safe Community
<input type="checkbox"/>	Enhance Organizational Excellence	<input type="checkbox"/>	Foster Economic Vitality
		<input checked="" type="checkbox"/>	Promote Environmental Excellence

Governing Policies/Bylaws/Legislation or Agreements

The Open Spaces and Recreation Facilities Bylaw 22-12 references the prohibition of feeding wildlife on public lands.

Public Participation Strategy

The public were invited to partake in the deer count using a mobile app. Citizens were encouraged to complete an online survey.

Alternatives for Consideration

n/a

CAO Comments

The urban deer count provides a sense of the trends and impacts of coexisting in Okotoks. To ensure we adapt and develop strategies that respond to those trends, I do recommend pursuing an impact analysis to undertake future deer counts.

Attachment(s)

n/a

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