



Lessons Learned:
Resulting from the District of Oak Bay's
Participation in the Capital Regional District
Deer Management Strategy Urban Pilot Project

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Lessons learned resulting from the District of Oak Bay's participation in the CRD Deer Management Strategy Urban Pilot Project.

Purpose: The District of Oak Bay wishes to share with other interested communities some insights and lessons learned resulting from the District of Oak Bay's participation in the CRD's Deer Management Strategy Urban Pilot Project.

Background: Wildlife management is the responsibility of the Provincial Government but is now being managed by local governments. In 2011 the Ministry of Environment directed the CRD to develop a Deer Management Strategy for the Capital Region. The Regional Deer Management Strategy was developed by the CRD and a Citizen's Advisory Group with input from wildlife and animal health experts from the provincial government and the private sector. The strategy explains the population of black-tailed deer, addresses the issues of deer-human conflicts and makes recommendations to effectively and humanely address public safety, health and wildlife issues.

There is an overpopulation of deer living in urban areas throughout the Capital Region. Our coastal climate offers urban deer an abundance of year round food and green space while enabling them to live in the absence of any natural predators. As a consequence, deer populations are increasing. Does give birth to twins, and we are now seeing more triplets born every spring – an indication of a strong and reliable food source and a safe environment in which to raise and habituate fawns. Deer-human conflicts are on the rise with real public safety implications.

District of Oak Bay: Complaints and concerns from residents are on the rise in Oak Bay. Conflicts and concerns include: vehicular collisions; aggressive deer interactions with pets and people; native plant and property damage; and deer feces in parks, yards and school fields. In response to the growing numbers of residents' concerns, the District of Oak Bay Council (the District) agreed to participate in the Capital Regional District's urban pilot project in November 2013 at an estimated cost of \$25,000.00. The pilot project guided the District through a number of deer-human conflict reduction measures. During the 2014 calendar year, the District:

- Reviewed fencing bylaws to ensure that rear and side fencing heights were appropriate to discourage deer from entering back yards.
- Re-printed copies of the CRD's public information brochures (2 brochures) and distributed them through the Oak Bay News to every household in the District.
- Reviewed the District's practices to ensure that Parks and Recreation departments were applying deer repellants to the District's parks and gardens and planting deer resistant plants.
- Increased fines for feeding the deer to \$300.00 and supported this initiative with education posters in high traffic areas throughout the community.
- Website updates and newspaper editorials.
- Increased signage in areas known for high concentrations of deer and high incidents of deer-vehicle collisions.
- Supported the CRD with a deer count in June 2014 to better understand the population densities in Oak Bay neighbourhoods.

As a condition of the District's participation in the CRD Deer Management Strategy pilot project, the District asked the CRD to ensure that every possible population management option be examined and implemented prior to the decision to reduce the population through a cull.

The decision to proceed with population reduction in the District of Oak Bay in 2014 was interrupted by the destruction of the Modified Clover Traps during the cull in Kimberly. The provincial government was not able to support the District with the necessary traps and for many months, it was unclear as to whether or not the traps would be rebuilt for the District's use. Late in 2014, the province confirmed their commitment to provide 5 Modified Clover Traps to support the District's decision to apply to the Province for a permit to harvest up to 25 black-tailed deer in Oak Bay.

Twenty three deer fatalities were addressed by Oak Bay police and Oak Bay public works in 2012. The number grew to forty in 2013 and thirty nine in 2014.

The 2014 municipal election provided all Councillors with an opportunity to publicly declare their position on deer management, and specifically, population reduction. The issue of whether or not to conduct a cull in Oak Bay was a high profile and very public election issue. Oak Bay residents elected Mayor and Council with a mandate to proceed with a cull.

The District applied to the Ministry of Forest Lands and Natural Resource Operations for a permit to reduce the population of deer in the District of Oak Bay by 25 deer in October 2014. The District engaged a contractor to lead the initiative and 11 deer were harvested over 16 days in February 2015. Homeowners offered their properties and the deer were given to local First Nations for Traditional food and ceremonial purposes.

Urban Pilot Study Area: Oak Bay – Lessons learned

Executive Summary:

There is a financial cost to doing nothing as well as a social cost. There are also real risks to public safety. The costs to taxpayers for managing deer fatalities and to homeowners through property damage, and fencing investments has not been calculated, however it should be noted as it is likely more significant than anyone realizes. We have reports of residents in Oak Bay who have been chased up their walkways to the door, whose children have been challenged by bucks in rut in their own play area, and whose pets have been trampled in their yards. The deer in Oak Bay are 6 and 7 generation habituated deer and they have lost much of their fear of humans. Escalating human deer conflicts are to be expected and learning more about these wild animals and how to live safely and responsibly with them in our neighbourhoods is an important part of any deer management strategy.

Greater, collaborative involvement from the province, who have overall responsibility for wildlife management in BC and who have the knowledge and expertise is an overarching theme in the lessons learned.

The District has no wildlife specialist on staff and therefore was reliant on information provided through the CRD's Deer Management Strategy team. The CRD in turn were relying on the expertise of the professional staff in the Provincial Government who have over-all responsibility for wildlife management in B.C. Wildlife management is a specialized area of expertise and more needs to be done to improve upon the access and exchange of clear, factual information that is written specifically for public consumption. The public demanded more factual information than was available. Given the sensitive nature of the issue, access to subject matter experts and knowledge to promote greater understanding is of paramount importance.

The District attended a Deer Management workshop in January 2015 led by the Union of BC Municipalities and the Ministry of Forest Lands and Natural Resource Operations. This workshop was attended by ministry staff, and representatives from 12 local governments all struggling with the same challenges around how to live safely and responsibly with growing populations of deer living in their communities. This was a very helpful and informative session.

The District observed that a very different model of operational and planning engagement was employed in the Kootenays, a model that saw a more active role for the MFLNRO regional wildlife biologist at the planning table shaping and implementing the deer management strategy in partnership with the municipal government and with citizen representatives from the local deer committee. Having subject matter experts actively taking part in informing and implementing a deer management strategy with local citizen involvement appears to be a model that promotes collaboration and shared understanding of all the intricate dynamics involved in addressing the challenges of urban deer in a responsible and humane manner. Improved collaboration between the provincial government staff and the planning team in the community would address many of the District's lessons learned in this document.

While there were residents living in the District of Oak Bay that were entirely opposed to population reduction – or were opposed to the only permitted methodology of capture and euthanize – the 2014 municipal election gave the District of Oak Bay a mandate to proceed. Ways to strengthen that mandate could have included a survey or a referendum question.

Population reduction options are limited and what few are available to urban municipalities are further reduced to only one permitted methodology: capture and euthanize. The nature of this undertaking in an urban setting is very challenging. While we believe that the majority of people in Oak Bay supported the cull, a well-organized and articulate public opposition from citizens, and from animal welfare organizations from across the country and throughout the world played a significant role in how the project was viewed outside of the District. This is to be anticipated going forward.

The District of Oak Bay was the first urban coastal community to undertake a cull. With the support of private property owners, eleven deer were harvested over sixteen days without detection or disturbing neighbourhoods. We learned that while difficult, it is possible providing there is leadership and sufficient social licence in the community. Regardless of having the support of the silent majority in our community, there is currently no permitted and socially acceptable way to responsibly and ethically manage a growing population of urban deer in a manner that does not financially and emotionally severely challenge the municipal leadership who are taking action.

Public safety continues to be an important lens in the evaluation as the real implications of deer-human conflicts continue. The issues of vehicle collisions, the biological carrying capacity of our environment and the socio-economic carrying capacity of our residents (property damage, fencing costs, vehicle damage, veterinary bills, stress) all continue.

District of Oak Bay Pilot Project Overview:

1. Data Monitoring

Deer fatalities in the District of Oak Bay

Though not scientific, this is a meaningful raw statistic and speaks to public safety concerns. These numbers were generated by the District’s public works department as they along with the municipal police were most involved in responding to injured and dead deer. While responding to problem or injured wildlife would normally be dealt with by the provincial conservation office, the responsibility fell to our local police. To ensure that this was done properly, our police were trained by conservation staff.

Year	Number of deer deaths
2012	23
2013	40
2014	39

Complaints

The CRD Deer Management Strategy Pilot Project attempted to lessen the District’s burden by directing complaints to their website. This call to action to the CRD was posted also on the District’s website. In reality, the District received a steady volume of verbal complaints, emails and letters. These most often went directly to the District’s Mayor and Council. Over time, the amount of information became overwhelming at the District, and there was no one person responsible for records management for this aspect of the project.

- **Lessons learned:**
 While the intention was to have the CRD manage and track complaints and inquiries, the reality is that the District was a natural point of contact. The heavy volume of inquiries over the duration of the project would have benefited from a dedicated resource to implement a proper records management process at the District.

Urban Deer Count

Wildlife experts in the provincial government informed us that Black-tailed does do not migrate very far from where they were born. They generally don’t cover more than a few square blocks. Home range in urban areas is estimated to be about 2.5 square kms. Bucks, however, will cover slightly more ground looking for females during the rut and for prime food.

Deer generally will not move to a new area unless they are pushed because of predation (animal or people), dense populations and/or a lack of desirable habitat.

The CRD with support from the District undertook a deer count over a period of 5 days in June 2014. The methodology that they used was informed by the Ministry of Forest Lands and Natural Resource Operations (MFLNRO) biologist responsible for rural wildlife management. The scientific merit and validity of the District's count methodology was continually challenged.

- **Lessons learned: Urban Deer Count**

Although there were many other influencing factors, the Pilot Project focussed on a deer count to inform population density and link these extrapolated estimates to determine the need for population reduction measures. Counting deer in an urban setting is challenging at best. Identifying a threshold for other aspects of deer human conflict in addition to population density would be a helpful guide to determine when there is a need for population reduction.

The count methodology used in the District, while recognized as a standard count practise in the wild, had never before been applied to an urban setting.

The District would recommend adopting the methodology used in the Kootenays. It includes citizen participation and involves driving/walking in a grid through all neighbourhoods over a number of days. The contractor that the District hired upon reviewing our local process indicated that the District's process would benefit from adopting what was done in the Kootenays as it is more suitable for an urban setting.

In the Kootenays, conservation officers, whose authorities include enforcement, were part of the planning and implementation team. The District and the CRD requested the support of the conservation office from the Province. They did not have the staff resources to lend to the initiative.

2. Education and Communications

There was an assumption built into the CRD Deer Management Strategy Pilot Project that community engagement and outreach had already taken place during the development of the CRD Deer Management Strategy as this process was very heavily focused on consultation and engagement.

The District's educational component was therefore limited to acting upon the recommendations within the pilot project as referenced at the beginning of this report. The District did however invest in the reproduction of the CRD educational brochures to ensure they were distributed through the local paper to every household and accessible on the District's website.

The District also worked directly with the CRD and the MFLNRO to strengthen the public information regarding permitted population reduction options. The District adopted a pro-active media engagement approach to encourage stronger awareness and understanding of the issues, to demonstrate that the District would be accessible to media and was prepared to

address public concerns. The spokesperson however was not a subject matter expert and as such the factual information presented was often challenged.

The District was learning in real time throughout this Pilot Project. The role of the BCSPCA leading up to and during the cull was not clear. Their very public opposition to the Oak Bay cull (but not the cull in Cranbrook) was confusing. The permit to undertake a cull is held by the Ministry of Forest Lands and Natural Resources. The permit provides municipalities with legal authority to proceed abiding by strict protocols. We were advised at the time of the cull, however, that once the deer is in the trap, the animal becomes the responsibility of the BCSPCA who have provincial oversight for the animal's humane handling.

The District, the District's contractor, along with staff from MFLNRO and the CRD met with the BCSPCA representatives. The BCSPCA acknowledged the appropriate expertise of the contractor and affirmed that the methodology of capture and euthanize is not an offence nor did it contravene either the Prevention of Cruelty to Animals Act or the Criminal Code of Canada.

- **Lessons learned: Education and Communication**

While citizens in Oak Bay were largely supportive of population reduction, more substantive educational outreach in the community would have helped the entire process as it would have identified earlier and remedied earlier the challenges associated with getting factual information from the provincial government out into the community.

Provincial government information sheets posted on line, while informative, are not sufficiently clear nor are they written for the purposes of addressing public concerns regarding population reduction. Citizens challenged the District's claims when it came to population reduction methodologies – what was allowed and what was not allowed by the Province, why and why not. Given that the authority for the permitting lies with the Provincial Government, the education with regard to options should be informed by the Ministry of Forest Lands and Natural Resource Operations and information should be clearly laid out and easily accessible for all.

There remains significant public confusion and debate over what population reduction options exist for municipalities in B.C., and then what population options the authorities in the provincial government will permit.

Greater collaborative involvement from the province, who have overall responsibility for wildlife management in BC and who have the knowledge and expertise would be a tremendous benefit reducing dramatically the risks associated with misinformation.

- **Lessons learned: BCSPCA**

Given that the Ministry of Forest Lands and Natural Resources is responsible for issuing a permit for population reduction, and that BCSPCA falls under the Ministry of Agriculture, assistance from the province to appropriately define the role and responsibilities of the BCSPCA in deer management strategies is needed.

The BCSPCA's dual role as advocates and enforcement adds a complicated and confusing element to this already emotionally charged initiative. It may be there is a larger role for this organization to play in helping address this emerging challenge of overpopulations of urban deer. The District was fortunate to be able to provide a letter of approval written by the BCSPCA regarding the professional conduct of the Oak Bay contractor. The letter acknowledged his professional services in another community.

3. Population Reduction Options:

What considerations and options were explored with the Province of BC and the CRD to address population reduction in Oak Bay?

Capture and Relocate: This method is not currently supported by the Ministry of Forest Lands and Natural Resource Operations for black-tailed deer in this region. The Ministry Forest Lands and Natural Resource Operations stated that it will not authorize the capture and relocation of black-tailed deer due to the transportation stress and resulting high mortality rate. Deer habituated to urban and suburban environments do not fare well when introduced into wild environments.

Tranquilize and Relocate: The Ministry of Forest Lands and Natural Resource Operations has stated that it will not authorize the use of tranquilizers to aid in relocation due to the high risk of the deer reacting poorly to the tranquilizer. Risks range from no reaction to the deer succumbing to the tranquilizer causing death. Deer habituated to urban and suburban environments do not fare well when introduced into wild environments. Residual tranquilizers can impact other animals that consume deer that have been tranquilized.

Immunocontraceptives: This method involves trapping a deer in a clover trap, releasing the males, marking the females and injecting them with a contraceptive. This is currently only possible and legal as part of a research project and the contraceptive application must be supervised by Provincial staff. It is necessary to trap the deer in a Clover Trap in order to give the inoculation and manage any appropriate tagging or radio collaring for tracking. The inoculation not only sterilizes the doe, it also makes the meat unfit for human consumption. If the animal dies, scavengers that feed on the inoculated carcass could become contaminated. Approximately 70-90% of the doe population must be treated in order to start slowing population growth. Best results occur in geographically isolated populations. The contraceptives are not currently licenced or approved by Health Canada for use except when being used for experimental scientific research and by permit only. Immunocontraceptive treatment needs to be ongoing in order to be effective over the long term. Treated deer will live out the remainder of their natural life.

Farming: The farming of black-tailed deer has not been supported as a deer management option by the government of BC. This is to reduce the risk of transferring diseases between wild populations and domesticated, farmed big game animals. According to the Provincial Big Game Farm Act, the only big game animals that can be legally farmed in the province are Fallow Deer, Reindeer and Bison.

Capture and Euthanize: Under the direction of professional wildlife experts, deer are baited into modified Clover traps. The wildlife experts use the trap to constrain the deer and employ a bolt gun to euthanize the deer. The deer dies quickly, and the meat, uncontaminated by tranquilizers or contraceptives, can be consumed rather than wasted.

- **Lessons Learned: Population Reduction Options**

Achieving social license to undertake a deer management plan that involves capture and euthanize population reduction measures is going to remain challenging for the provincial government, municipal governments and communities. Factual public education that includes subject matter experts is a critical success factor – so is providing a forum for innovation.

Those that are opposed to capture and euthanize are not necessary opposed to the need to implement a responsible deer management strategy. There is no one in Oak Bay who would not welcome an alternative option to achieving the necessary objective of reducing the population of urban deer providing it is: humane, ethical, legal and affordable.

It is important to note however that the District received many inquiries from residents who wanted to buy the deer meat, and editorial coverage included strong sentiments that the deer meat would be welcomed by those families in our region who are living in poverty. In speaking with the communities in the Kootenays, the food banks are extremely grateful to take the meat. Our First Nations communities were pleased to receive the deer honouring the animal as a food source and for cultural purposes.

The question remains, would harvesting deer on an annual basis find greater acceptability over time? Education and leadership are the two key success factors.

Earlier engagement with a neutral third party to help with the public education throughout the community – such as Wild Safe BC, an organization that specialize in educating the public on how to live safely with wildlife and avoid conflict – would have helped create a foundation of important, trusted knowledge.

4. Modified Clover Traps

The provincial government confirmed in the fall of 2014 that it would provide 5 modified Clover traps to the CRD in support of the Oak Bay pilot.

Online footage of a trapped deer being handled by people inside the trap made its way prominently into the social media and mainstream media networks. The MFLNRO confirmed that the footage posted and aired was not indicative of the capture and euthanize practices. While a person would enter the trap to tag a deer or to administer a shot, no one enters the trap during capture and euthanize. The images of a frightened, trapped animal were disturbing for many viewers. Our local media were very responsive to the correction and took down the footage.

- **Lessons learned: Modified Clover Traps**

A media strategy that engages much earlier as a component of the public outreach education may have helped address the misperceptions around the utilization of the trap and the trapping. Educating the public on the fact that deer and other wildlife are trapped as part of responsible practise in the wild to tag them and monitor them may have eased some concerns. The animal is only startled during the period that it is being approached which is a matter of a few minutes.

5. Permitting

The District applied to the MFLNO for a permit to reduce the population of deer in Oak Bay by 25 in October 2014 and received the permit in January 2015. The permit was valid for the time period up until March 15.

- **Lessons learned: Permitting**

Municipalities that are attempting a population reduction would benefit from consistent guidelines across the province to standardize the permit application content and process.

6. Contracting and Training

The CRD wrote a request for proposal to attract a contractor to implement the population reduction within the strict conditions of the permit. Given that the permit methodology is restricted to capture and euthanize, those individuals locally with any relevant experience was very limited. Some of those who were identified as strong candidates were not interested in such a controversial assignment, and others who may have been interested determined that the remuneration was not sufficient given the controversy involved.

The District reached out to the most experienced person in this highly sensitive and specialized area. He came to us from the Kootenays. The District's contractor fast became an invaluable resource bringing his many years of experience and wisdom to the District's plan. Of great significance was the professional recognition by the BCSPCA for his professionalism. The contractor was only available, however for 21 days.

The contractor training on the use of the Modified Clover Trap and the Captive Bolt Gun is undertaken by the provincial government. A team of two contractors is necessary to undertake the cull, one lead and one assistant. The training took place out of town over 1.5 days.

- **Lessons learned: Contracting and training**

Finding a contractor with the appropriate experience and appropriate demeanor is challenging. Someone who is a hunter does not necessarily have the appropriate skills and temperament to manage all of the complex requirements that accompany something as sensitive in nature as this initiative.

The District would have benefited greatly from engaging with our contractor at the beginning of the Pilot Project to hear first-hand his experience and recommended approach to community engagement, the count, the qualifications of the contractor etc.

In addition, the contractor's long standing relationship with the subject matter experts working in the MFLNR would have allowed for improved direct communication and may have strengthened the quality of the information crafted and shared with the public.

Some of the contractor's observations included:

- Recommendation of a different count methodology
- Recommendation that the Deer Management Strategy team be established before there is a need for a population reduction and that this team include local citizens, municipal staff, provincial biologist and conservation officer.
- Observed that the District started the cull too late in the allowable season. He noted that our mild coastal climate and the unseasonal mild February weather created a lush food source for the deer. The deer were not as tempted by the bait in the traps as the deer in the Kootenays that are being trapped when there is snow cover over their food.
- Observed that the District has a healthy population of racoons and rats that were interfering with the process by triggering the traps shut as they entered to dine on the bait. They also caused damage to the netting.
- Observed that a cull would take longer than other jurisdictions because of the abundance of natural food habitat and that therefore, more time and more traps would be required.
- Recommended that minor modifications to clover traps would be beneficial.

7. Trapping Locations

Home owners volunteered their properties to host the traps. The District had many more properties volunteered than available traps. Locations were selected based on areas where there were known populations of deer and consideration was given to privacy and topography of the yard. Through discussions with homeowners, the District learned that private home insurance would likely not cover any incidents that might take place on the homeowner's property during the cull. Given the high profile challenges to the cull, and given the precedent in other communities for trespass and vandalism, the District entered into agreements with property owners to ensure that the District would be responsible for any property damage associated with the cull. The District also received releases from the property owners to allow for the District and the CRD staff to manage any issues of trespass and potential media attention that might result. As there were no incidents that took place during the cull, these arrangements were not tested.

8. Donations of Meat

As deer meat is a Traditional food source for First Nations, the District through the CRD worked directly with local First Nations to arrange for the deer to be given to them. The harvested deer were used for food and for ceremonial purposes.

- **Lessons learned: donations of meat**
While the province has developed health protocols that inform how harvested deer meat must be treated and inspected before it is given to shelters and food banks, we could not find any protocols that govern in the same way the donation of culled game meat to

First Nations communities who preferred to receive the animal whole and hang and butcher the animal in Traditional ways.

The document, Donated Game Meat: Standards for the Donation of Culled Game Meat should be updated in cooperation with First Nations to include the donation of culled game meat to Aboriginal communities.

The District also suggests exploring opportunities with First Nations to take a greater role in the harvesting of deer in communities.

9. Costs:

The District signed onto a Pilot Project with the understanding that the scope of investment would be \$25,000.00. The nature of a Pilot Project assumes learning and responding in real time which inevitably has cost implications. While the hopeful intention was the CRD would be operationalizing the Pilot Project in Oak Bay, the District and the CRD soon realized the limitations of this approach as much of the implementation required local knowledge of the community and the District. Given that the District did not have an internal staff resource who had the time or the expertise to assume this responsibility – and given the highly sensitive political nature of the initiative itself, the CAO assumed the leadership role on the implementation of the Pilot Project and contracted part time a local citizen with communications, risk management and project management experience to assist.

In addition, other expenses were incurred in the following areas:

- The deer count required the unexpected involvement of the District's animal control contractor;
- The additional insurance policy required to protect home owners resulted in corresponding legal costs;
- The CRD provided to each municipality in the region a few copies of two educational brochures. The District printed a second run and distributed them through the Oak Bay News to ensure that every resident in Oak Bay received these two information brochures at their home;
- The District increased signage in key areas;
- The District chose to create and distribute posters and hand bills to educate the community on the fine increases for feeding wildlife;
- The higher than anticipated contracting costs due to the need to hire a contractor from the Kootenays;
- Attendance at the UBCM Deer Management Forum;
- The cost of staff time involved in implementing something as high profile and sensitive as this initiative;
- The District would have benefited from an earlier Deer Management Forum where the subject matter experts from the province, and those with authority including the BCSPCA and municipalities are sharing and hearing the same information. The efficiencies that would result from greater collaboration between the province and municipalities along with the standardization of accessible information would have positive financial implications to the overall initiative. The learning curve is costly.

At the Deer Management Forum, the District found the model used by Invermere's Urban Deer Management Committee (Deer Committee) to be an interesting one. The goal of the committee was not to find consensus where all concerns could be met, nor was it to eradicate the deer population from the community. The Deer Committee was tasked with identifying resident issues and concerns, researching and evaluating solutions, determining which potential solutions may work in Invermere and making recommendations to implement proposed actions. It is important to note that despite this grass roots approach, the District of Invermere still concludes that there is no simple solution to address the concerns of all residents and at the end of the day, leadership is what is required.

Seeking alternative sources of funding to help lessen the burden on municipalities/taxpayers is needed. The responsibility for wildlife management in BC is with the provincial government. As this issue of urban deer begins to escalate throughout the province, perhaps the role of ICBC could also be considered given the high number of vehicle collisions that take place across the province.

10. Next steps:

- District of Oak Bay to continue to monitor deer human conflicts going forward.
- District to receive CRD Project evaluation following a second deer count undertaken by the CRD in June.
- District awaits recommendations from CRD regarding Deer Management Strategy to determine next steps for the Capital Region including Oak Bay.