Attachment 5: Challenges and opportunities of different wildlife management approaches

Relocation

Some residents have suggested relocation as a response to nuisance wildlife but this method is not a long-term solution and can pose undesirable consequences for both people and wildlife due to the following observations:

- If an area is attractive to wildlife – with good sources of food or shelter – other animals will quickly take up residence and re-initiate human-wildlife conflict even after the problem wildlife is relocated.
- Creating a void by removing animals from an area can result in greater litter size the following year from the remaining wildlife in the area.
- Moving animals around increases the chances of introducing or spreading diseases such as rabies.
- Relocation threatens the welfare of wildlife. Relocated wildlife may have a difficult time meeting their basic needs in unfamiliar areas or areas with limited resources. They also might come into conflict with local animals, which can lead to injury or death.

For these reasons, captured wildlife must be released unharmed within 1 km of the capture site under the *Fish and Wildlife Conservation Act.*

Culling

Media articles have recently suggested "culls" as a method for managing some wildlife populations in Toronto. Culls are the wide-scale indiscriminate trapping/hunting of a specific wildlife species. Consultations with subject matter experts indicates that culls are not only challenging to implement in urban environments, but also ineffective in controlling wildlife populations.

In recent years, some Canadian jurisdictions such as Saskatchewan have implemented culls to reduce coyote populations, with little measurable success. Coyotes in particular (and to a certain extent most other fur-bearing mammals) exercise compensatory reproduction, which means that reproduction rates increase as individuals are removed from the population, particularly if more food and shelter is available for surviving members.

MNRF is not aware of any similar programs to reduce raccoon numbers in Canada and around the world, but believes that without an extremely intensive effort (hundreds of trappers; tens of thousands raccoons trapped), a program to reduce the number of raccoons in the city would have little lasting effect. In their estimate, racoon populations would return to their prior population size within 2-3 years because there is a vast amount of food, shelter and water available in urban areas for remaining animals and as a result, they will continue to reproduce.

Large scale trapping of local wildlife population could also be viewed poorly by large segments of the public. Organizations such as Toronto Wildlife Centre, Animal Alliance of Canada and Toronto Humane Society have expressed strong contentions with this particular method in their conversations with Municipal Licensing and Standards. They find the method both ineffective and inhumane as a solution to human-wildlife conflict.

There are remaining questions about the authority or restrictions that would be imposed on the City if it were to implement a cull. First, all hunting and trapping activities would be required to comply with the provisions of the *Fish and Wildlife Conservation Act, 1997* and regulations. For instance, the Act contains restrictions on hunting and trapping at night, for bounties, on property without the consent of the owner or occupant of a property, etc.

In addition and depending on how the cull was implemented, these activities would give rise to additional liability concerns. These could include claims for damage to property and injuries to persons that might occur in the course of the hunting or trapping. These issues would be magnified if the hunting and trapping occurred on both private and public property, which would be necessary to achieve an effective population control.

City of Windsor's Skunk Control Program

The City of Windsor implemented a pilot Skunk Control Program in 2013 to address an increase in skunk population and rising complaints from the public. Through the program, residents could request City staff to inspect for evidence of skunks and deploy live-traps on their properties. The captured skunks were then brought to a contractor for humane destruction. The program also included an educational component in which residents were informed about cohabitation and deterrents at the time of inspection. A budget of $250,000 was allocated to buy specially designed live-traps, train city personnel in skunk removal, and contract a local veterinarian to conduct euthanasia

Windsor's Council discontinued the pilot program in May 2014 because staff concluded that it "had little effect on the existing skunk population." In total, 48 skunks were trapped and euthanized during the 12-month program, while 102 other types of wildlife were trapped and released immediately on-site. Staff noted that the skunk population declined due to natural regulation such as disease (i.e. canine distemper) and greater competition for food, water, and shelter.

Sterilization

Another option for population control is the mass sterilization of wildlife through either live-capture and surgical sterilization or, the use of oral contraceptives placed out in baits. According to experts at the Ministry of Natural Resources and Forestry, both options are extremely expensive, time-consuming, and difficult to achieve, particularly in urban settings. There are currently no registered chemical contraceptives for raccoons in Canada or the United States, although studies are ongoing.

Foremost, subject matter experts would have to be engaged to study and develop a sophisticated approach to sterilization that has a meaningful impact on the local wildlife population. For example, it is unclear how many raccoons would have to be neutered to ensure a decline in raccoon population. In the case of feral cats, existing studies indicate that 80% of the feral cat population needs to be neutered to effectively reduce their numbers.

Considerable expense would also be required to employ additional experienced and qualified veterinarians to perform large numbers of surgical procedures on captured animals and to upgrade present facilities. The City's Animal Care Centers are equipped to only treat domestic animals and existing staff would need to receive additional training on wildlife sterilization. What is more, the City's centers would also have to obtain permission and a license from the province to perform wildlife operations.

In terms of using bait with chemical reproductive inhibitors, there are environmental concerns that this approach could have unforeseen consequences on humans, companion animals and other wildlife species.

Prevention & Education

The Ministry of Natural Resources and Forestry promotes education on prevention as the preferred approach to reducing the negative impact of human-wildlife interactions. According to Ministry staff, strong public educational efforts provide a long-term solution to wildlife population problems, with low risk and cost for the municipality and its residents. If more people restrict wildlife's access to food, water and shelter, not only will the occurrence of human-wildlife conflict shrink, the carrying capacity of wildlife in a particular environment will decrease, along with its population.

The scan of practices in other jurisdictions such as Markham, Oakville, Ottawa and Vancouver indicates that cities are also choosing education on wildlife conflict prevention as the preferred method of resolving, minimizing, or eliminating negative human-wildlife interactions.

City of Markham for example, contracts the OSPCA to conduct home audits for residents in order to identify ways to make their properties wildlife resistant. According to staff, the audit program is effective in reducing human-wildlife conflict but not widely requested by the public.

Oakville's Wildlife Strategy (OWLS), 2012 recognizes that "in many cases, the most important factor in addressing [human-wildlife] conflict is education. By understanding why a situation is occurring and/or how to prevent it, the conflict can be diminished or eliminated in many cases" (45). To support these goals, Oakville implemented a number of wildlife education initiatives, including fact-sheets, new website content and a speaker series.

The City of Ottawa's Wildlife Strategy (2013) also "advocates prevention as the preferred approach to dealing with human-wildlife conflicts on private property, especially in urban areas" (7). Similar to Oakville, the City of Ottawa has pursued this goal through a Wildlife Speakers Series to help generate media interest and public awareness about how to co-exist with wildlife in the city.

Some municipalities have also focused their efforts on building partnerships with wildlife or ecological organizations to improve public education. The City of Vancouver for instance, has established the Urban Wildlife Network to standardize messaging about urban wildlife among various agencies and non-governmental organizations.

Education initiatives on wildlife-conflict prevention tend to focus on the following topics:

- How to wildlife proof homes (i.e. screening of entry points, maintenance of fencing)
- How to practice proper waste management techniques
- Discouraging the direct or indirect feeding of wildlife
- How to safely remove animal feces

Prevention & Urban Development

The City of Ottawa has recently drafted a Wildlife Construction Protocol that includes guidance for developers, builders and contractors, on how to prevent and resolve human-wildlife conflicts during the actual development process. It also provides recommendations on how developers can help reduce post-construction conflicts between residents and wildlife, using wildlife-proofing measures and "owner awareness packages." The Protocol will be implemented as part of the City of Ottawa's development review process once it is approved by City Council.