

TOWN OF CANMORE SOLID WASTE SERVICES

Bear Proof Waste Handling System – The Town of Canmore Experience

Overview

This paper will detail the events, challenges and successes that lead to the elimination of curbside waste collection and the implementation of a complete animal proof waste handling system. The following will be addressed:

- Atmosphere leading to the decision to eliminate curbside waste collection
- Importance of public involvement (Waste Management Committee)
- Requirements for expert input
- Steps taken to site the containers
- Public education process
- Ongoing challenges

In The Beginning

The Town of Canmore is situated in the Bow Valley at the gateway to the Canadian Rockies. Canmore, straddling the Trans-Canada highway, is 100 Kilometres from Calgary and 2 Kilometres from the gates of Banff National Park in Alberta.

Canmore was developed as a coal mining town at the end of the 1800s. The mine remained the Town's primary employer until 1979 when the mine was closed permanently. It went through some tough economic times until the 1988 Olympic Games in Calgary that saw the Nordic events competed at the newly constructed Canmore Nordic Centre. Since the Olympic Games, the economy has improved steadily with a growth rate from 6% – 10% annually throughout the 1990s. We now have a population over 10,500 of permanent residents.

Canmore Demographics

Demographics of the population range from the service industry, professionals, home businesses, construction and trade, small business, retirees and non-permanent persons. Approximately 20% of the homes serve as second homes and are not occupied year round. The average home in Canmore is worth \$250,000 (1999).

Future Growth

Do we foresee an economic slow down? Are things going to decrease, plateau or increase? Alberta is booming, oil prices are in our favour and there is a moratorium on development in Banff. Presently, these factors contribute to an increase in development in Canmore and therefore, the potential for an increase in bear-human encounters.

Objectives To Minimize Impact

Throughout the 1990's, as Canmore was experiencing steady growth, there were pressures on the Town to implement programs that would minimize the impact on our environment and wildlife population. In the Solid Waste Services department this translated to the establishment of recycling programs, toxic round-ups and an animal proof waste handling system.

To assist with program implementation, the Town took advantage of grass roots movement and established a Waste Management Committee (WMC) made up of interested and concerned citizens. The WMC was used extensively during the implementation of the animal proof waste handling system and proved to be a tremendous asset.

Waste Collection - History

Up until 1997, the Town of Canmore provided its residents with a traditional curbside waste collection program.

In the fall of 1996, responding to increasing concerns from the public and environment groups regarding bears in waste, Council requested the Waste Management Committee to investigate options for animal proofing the Town's waste handling system. The committee recommended that the Town eliminate curbside collection and implement a communal 'bear bin' collection system. Despite this recommendation, Council voted in favour of a dual system waste handling system that included both curbside collection and neighbourhood animal proof waste containers. There was the perception at the Council level that residents were opposed to the complete elimination of curbside collection. This hybrid system gave residents the option of continuing to place waste out for curbside pick up on their collection day or use the bear proof containers any time.

Coinciding with the start of the dual system in April 1997, strict new standards for storage and placement of waste were written into the Town's Waste Control Bylaw. These include:

- Waste must be stored in an animal proof location between pick-up days (i.e. house or garage not garden, shed or wooden box)
- Waste placed for collection must be in a can with secure lid (i.e. no boxes or waste bags)
- Waste could not be placed out for collection earlier than 6AM on collection day (i.e. not the night before)

Anyone not able to meet these storage and/or placement requirements would have the option of taking their waste to one of the central animal proof waste containers.

Commercial Sector

The commercial sector were required to have implemented animal proof waste handling systems as well. Existing businesses were allowed one year from the Waste Control Bylaw's enactment to replace their waste handling container with an acceptable animal proof container. New businesses were required to conform to the new Waste Control Bylaw immediately.

What Type of Container

Providing a communal waste collection system required the evaluation for an acceptable waste container. Of the tender submissions received, there were two types of containers that met the criteria for animal proof as established by the lead biologist for the Eastern Slopes Grizzly Project Committee on Resources and the Environment who was also a member of our Waste Management Committee. Having a respected bear expert working with us as part of the WMC proved to be a valuable tool as it gave the WMC clout and credibility.

The containers had to meet the following criteria to be defined animal proof:

- Tight lids to reduce odours.
- Lids must be self-closing.
- Latches for its lids and bag removal must be bear proof (i.e. claws unable to reach the latch trigger mechanism).
- Hinges and latches for lids must be sufficiently strong such that they can not be pried open by claws (able to withstand several thousands of force). The rule of thumb is that it can be dismantled using a crowbar then it is not bear proof.
- The container must be sufficiently stable or capable of being anchored to prevent tipping by large bears.
- Container material must be sufficiently strong to prevent bears chewing, battering or crushing the containers (i.e. able to withstand several thousand pounds of force).

After review it was agreed that the Town of Canmore would purchase the Haul-All Equipment container system manufactured in Lethbridge, Alberta due to following advantages:

- Proven track record within the national parks
- Aesthetic appearance
- Ergonomic access doors
- 20 year life expectancy

Communal Waste Container Locations

The first order of business in implementing the dual system was the siting of sixty bear proof containers in neighbourhoods and multi-residential areas. Placement of the sixty waste containers proved to be a difficult exercise for several reasons:

- New – Introduction of container and service (new containers and service)
- NIMBY – Proximity of containers to homes
- Space constraints – Multi-Family Complexes have limited common space

Despite the difficulty, we felt the containers should be located within the neighbourhoods for several reasons:

- Ownership
- Self-policing
- Shared services

The Siting Process

A review was completed of the entire community to find sixty suitable locations. The process started with administration sending a letter and map to all visually affected homeowners of all proposed locations. The public was given two weeks to reply with comments and / or concerns. The majority of the public was receptive to the introduction of the waste containers, as they were aware of the wildlife concern and community obligations. Some other comments received included:

- Money and time could be better spent destroying the bears.
- Several people who agreed with the new service did not want the containers close to their homes as the containers would attract wildlife.

The placement hurdle succeeded with a comprehensive education program which included the following:

- Flyer mailed to every household (explaining the new system with helpful hints)
- Information booth at Canmore Trade Show
- Advertisements in Canmore Leader (local paper)

Was It Working?

An evaluation of the program began immediately based on the following criteria:

- Were bears and /or other animals getting into the waste?
- Cost to deliver program
- Use of communal containers by residents

Minimize Animal / Waste Encounters

When the program began there were several bear / waste related altercations in each year. The change to the new system saw a slight decrease in activity. However, the number of bear / waste altercations did not drop as significantly as hoped. Despite the stiff fines under the Waste Control Bylaw for improperly storing waste, some residents continued to keep waste generated between collection days outside in sheds or storage boxes that were not animal proof. Therefore the bears continued to have access to as easy food source.

Cost To Deliver Program

The Town of Canmore contracts out its waste collection program. A new contract was tendered for the start of the new dual waste collection system. The contract was awarded on:

- a price per residential unit (includes single units and units in multi-family complexes),
- a tipping rate for container service,
- and a disposal fee at Calgary area landfill site.

After several months, the community began to warm to the containers and their convenience and they became very popular. People could dispose of their waste at any time, 6PM on a Thursday or 8AM on a Sunday. Typically larger volumes of waste are generated on weekends (especially with many homes occupied on weekends only). The containers were quickly becoming the only means of disposal for many of Canmore's residents.

On the downside, the program was becoming very costly to operate as the town paid for a complete curbside program for all residents many of who were now choosing to utilize the bear proof system. As more and more residents chose to utilize the communal containers, the operating price tag increased.

Communal Containers Use

During the summer months of 1997, members of the Waste Management Committee completed a Curbside Monitoring Program. The committee members rode on the trucks during the curbside collection days and recorded the number of homes that did not have waste out at the curbside. It was assumed that if no waste was placed out for collection, then the household was utilizing the animal proof waste containers for disposal of waste.

The monitoring results indicated an average of 55% of households used the bear proof waste containers. It was also noted that some neighbourhoods achieved up to 77% in favour of the animal proof waste containers. This information was provided to Council who indicated they would consider eliminating curbside collection if the total number of households using the bear proof waste containers reached 66%.

Summer of 1998

In the summer of 1998, due in part to a poor berry crop, the number of bear sightings grew in town and the number of bear / waste related incidents increased substantially. Local Fish & Wild officers pleaded with the Town via the local newspaper to remove curbside collection and provide a complete animal proof waste handling system. In addition, members of the public were sending letters to the paper editor requesting the Town eliminate curbside collection.

The summer season continued and the number of bear / waste related problems increased to such a level that the Mayor sent a letter to all residents urging the utilization of the animal proof waste containers only until the bears went into hibernation.

When the summer season ended there were over 300 bear sightings recorded, nine bears relocated and four habituated bears destroyed.

As in 1997 the Waste Management Committee conducted a curbside monitoring program from March to August of 1998 and the total town participation in the animal proof waste containers was 62% for 1998. The use of the animal proof waste containers increased 7% over the previous summer to 62%.

Council Eliminate Curbside Collection

That September the Waste Management Committee undertook another audit and found that only 23% of households were utilizing the curbside collection program.

Despite this fact the Town was paying the contractor based on a 100% of households receiving curbside collection. The costs associated with running the dual collection system continued to rise. The recommendation was accepted unanimously by Council.

The Second Siting Process

Town administration and the Waste Management Committee were now faced with the task of siting an additional sixty animal proof waste containers to service all neighbourhoods. Providing adequate volume for weekends and holidays when Canmore triples in population was imperative. The following criteria was developed:

- 3.0 m³ waste container for every 20 homes
- 4.5 m³ waste container for every 30 homes
- Waste containers would be a maximum of one block from every home
- Waste containers would be located on municipal reserve (i.e. public land)
- Waste containers would be doubled only when required
- Waste containers would not be combined with other services whenever possible (i.e. beside a Canada Post mail kiosk)

Similar to the first siting process, the next hurdle was to work with the public to identify suitable locations for placement of containers. The following steps were taken to establish container locations:

- Administration and the Waste Management Committee (WMC) reviewed the entire community to determine ideal locations based on the above criteria. Maps were used to determine adequate coverage.
- A letter and site map indicating the exact location was sent to all visually affected residents. The letter stated the Town's intent and stated there was a two-week response period for comments or complaints.
- If no comments were received the locations were deemed permanent.
- If a comment or complaint was received it was recorded and brought to the following WMC meeting for further review.
- The WMC reviewed the contested locations by:
 1. Reviewing letters of protest
 2. Conducting site visit
 3. Identifying alternative locations
- If the WMC agreed with the concerns another location was sought with the process starting over again.
- If the WMC disagreed with the concerns the location was not changed and the homeowner was notified that they had with the option to take their concerns to Council for a final decision.

Siting Hurdles

The community wanted the containers but did not within their neighbourhoods. Over 600 letters were sent out and almost immediately we received phone calls and letters of concern or comments as listed below:

- Animal attractant – Bears will be attracted to the containers
- Smell – Rotting waste
- Real estate depreciation – Price of home will drop in resale value
- Soil contamination – Effluent from containers entering storm sewer or groundwater
- Eye sore – View container from kitchen window
- Noise – Banging of lids
- Difficult to use – Doors are hard to operate for disabled and elder members of the community
- Increased automobile traffic – Neighbours will drive to container
- Closer? – Can we have it closer to our home?

Public & Council Meetings

Several sites required public meetings that included the affected residents, administration, a Waste Management Committee member and a Council representative.

After the public meetings were completed and no consensus was met some neighbourhoods requested that their site be reviewed and decided on by Council. The council meeting was standing room only and it was quite evident that people were tense and stressed. In the end administration and the Waste Management Committee successfully located all but one of the proposed animal proof waste containers.

Bear Proof Waste Containers Only

In May of 1999 the curbside collection system was eliminated and the residents of Canmore had the communal waste containers only. Throughout the summer the success of the complete animal proof waste handling system became evident. There were several sitings of bears in and around Canmore town site however there were zero bear / waste incidents.

The next community to our east was not as lucky. They still provided a curbside collection program and were inundated with bears eager to continue consuming human food.

Thankfully the community introduced an animal proof waste handling system this March with much success and minimal public opposition, due in part to the large media attention received in Canmore.

Presently – 2000

Since the change to a complete bear proof waste handling system it is very evident that we have had a positive impact on waste / bear related encounters as we did not have one this summer.

We are experiencing a concern with respect to large sundry items such as mattresses and chairs being left beside the containers. We do provide a large item clean up in the spring and fall but some people have chosen not to wait. Town staff remove these items as soon as they are identified and together with the waste collection contractor ensure that areas around the containers are kept as tidy as possible.

Other challenges include:

- Graffiti on containers
- Litter around containers
- Increase volume of material disposal (easier to throw items away at the end of each block then compared to our recycling depot)
- Abuse of containers from commercial businesses such as contractors and landscapers, etc.
- Container screening

Where Do We Go From Here

We have several residents who actively compost both leaf and yard waste. Some also include kitchen organic material, an obvious animal attractant if not composted properly. The town is reviewing the option of banning backyard composting of kitchen organic waste material. Residents will still be encouraged to compost leaf and yard waste and compost kitchen organic material in an indoor vermi-composter.

Though not waste related, birdfeeders have become somewhat of an issue recently. We have had several damaged birdfeeders or sightings of bears caught up a birdfeeder pole this summer. Birdfeeders fall into a grey area in our community in terms of where we address them in our bylaws. Because of the association of bears and food waste it will be addressed in our Waste Control Bylaw. Our Fish and Wildlife office have requested that the Town to ban the use of birdfeeders from early spring until early fall while the bears are active.

Summary

Points that greatly assisted the implementation and success of the program:

- Waste Management Committee – Committee made up of concerned and interested citizens established and sanctioned by Council
- Public concern / environmental group putting pressure on Council
- Experts – Wildlife biologists working with Town
- Waste Control Bylaw – a Council approved bylaw with teeth that listed the infractions and subsequent fines

Conclusion

The Town of Canmore is now very proud of its waste handling system and how the community has embraced the change. We are very fortunate to be living in the Rockies with its mountaneousque landscape and the opportunity to catch a glimpse of our graceful wildlife when we can. We have completed a long successful process due to public consultation that has enabled us to co-exist with wildlife in terms of waste generation and disposal.