



Incinerators and Garbage Dumps

Waterton shares a common problem with every community in Canada and possibly the world: garbage disposal. But what sets Waterton apart is its national park status and its mandate to simultaneously protect the land and wildlife. However, for most of the 20th century, the goal of garbage disposal was simply to get rid of it and the method of choice was to burn and bury it. Protection of land and animals took a backseat.

The regular collection of garbage was set out by national park regulations as early as 1914¹ but at that time Waterton's development was limited to only one hotel, a rough campground and staff accommodation at the park compound. The First World War kept additional townsite building to a minimum so garbage was easily handled between 1915 and 1919 when only about 3,400 people per year visited the park.² Nor was garbage a significant problem in 1920 when an incinerator was built.³

When regional tourist interest in Waterton began to blossom in the middle to late-1920s, visitation soared as did building in the townsite to accommodate those interests. Hotels, boarding houses, restaurants, campground improvements and new cabins were added with abandon.⁴ More people meant more garbage. More garbage created a need to come up with solutions to get rid of it.

Initially, a man named Lexi Jarvis, a park labourer, was assigned to pick up garbage from residences and businesses. Using a horse drawn dump cart, Jarvis and his horse, Noble, twice daily slowly plodded to the garbage dump located north of Middle Waterton Lake where material was burned and buried. Like many draft animals, Noble usually held to one speed--slow. A tale is told about the posting of a traffic speed sign in the townsite which concerned Jarvis who believed the sign indicated a minimum speed rather than a maximum. It was impossible, he said, to keep going eight miles per hour with his horse.⁵ In fact, as Ken Goble, park resident, noted, "Going towards the dump

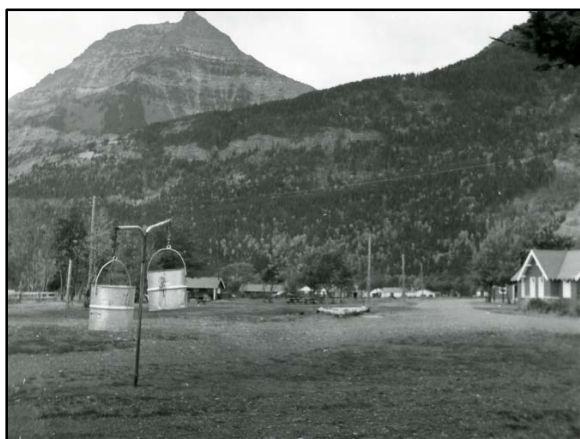


*The former incinerator site is shown here in the circle, with a view to the east. A larger building below the circle is Camp Columbus.
(Photo: Parks Canada/Kurt Seel)*

ground you almost had to put up a stake to see if Old Noble was moving but on the way home he almost made three miles an hour.”⁶

The purchase of trucks expedited garbage pickup and by the fiscal year 1929-1930 the first incinerator site, which was little more than a burning pit but was described as “an incinerator,” was constructed in Waterton.⁷ Nonetheless, it was an improvement in garbage disposal over the original dumping ground.⁸ Meanwhile in the townsite, bears knocking over garbage cans at night in search of easy access to food scraps was commonplace for years to come since only a few leaseholders had a garage or other bear-deterrent storage. Residents got to know individual bears by sight often giving them names as if they were pets, all the while taking precautions when returning home after dark to avoid a run-in with a garbage-seeking bear.⁹

The habituation of bears to garbage, especially in the townsite, came to the fore in the summer of 1960 when a new policy was proposed to identify problem bears by marking them with red paint. Following the destruction of a sow and two cubs in a cabin owner’s yard, Chief Park Warden Frank Camp adamantly told *The Lethbridge Herald* that



Oil drums were adapted for use as garbage receptacles that discouraged bears.
(Photo: WLNP Archives)

responsibility for problem bears was shared: “Bears do not come into the townsite because of a social desire. They come in to find available food. While many townspeople make an honest attempt to dispose of their garbage in such a way as to not attract bears, others are somewhat indifferent in this respect. Until the residents honestly try to remove the food attraction to bears, it is felt the bear problem will continue to exist and some innocent animals will be killed as a result.”¹⁰

Meanwhile in the campground and at picnic sites, Waterton’s staff came up with an innovative “bear proof” garbage container in the summer of 1960 which was adopted as

one of two standard installations. The Waterton innovative garbage container was a 45-gallon drum painted, with aluminum paint to dress it up, which was suspended from a chain on a two-metre long curved steel post set in a concrete base. Some of the more clever bears learned that they could jump into the barrel head first when the container swung towards them which resulted in a modification by park workers who installed a rotating post which successfully outwitted the bears. The following winter, about 50 additional containers were built and the following summer they proved to be an effective bear deterrent.¹¹

In an on-going strategy to deal with garbage and the associated wildlife problems, a new incinerator was designed in 1962 by E. A. Rindt, the park’s resident professional engineer. Soil conditions at the proposed location, very near the old site, were

determined to be insufficient for the new structure so it was built in an excavation on the nearby rock outcrop.¹² The new incinerator was completed under the winter works program of 1962-1963.¹³ The reinforced concrete block incinerator, 12 feet wide by 24 feet long by 12 feet high, was built under contract to Francis Hankin and Company Limited of Montreal.¹⁴

The new facility served three key purposes: it reduced the insect and odor nuisance of the open dump, reduced the ever-present fire hazard of the dump and was also an animal deterrent. “Having no open garbage dump grounds in Waterton Park will also undoubtedly reduce the number of bears that enter Waterton Park townsite and various



Locke Marshall, one-time incinerator employee, stands below the rock outcropping that was incorporated into the structure of the incinerator. (Photo: Parks Canada/Edwin Knox)

campgrounds in search of food. Park officials feel that if the bears are not ‘trained’ to eat garbage they will be less likely to go in search of same,” *The Lethbridge Herald* reported.¹⁵

It was a good idea but some bears proved to be irrevocably habituated to garbage, ever ready for an easy snack and although repeatedly discouraged from loitering at the new incinerator, they persisted. By the time incinerator employee, 17-year-old Locke Marshall, started work at the incinerator in 1977, bears were endemic, and the facility served as a natural bear magnet. Marshall, who worked

alone, had no escape vehicle, no bear spray, no weapon and no radio in the event of an emergency, applied good sense to keep space between himself and all visiting bruins.

In his two summers at the incinerator, he had only one encounter with a black bear that exhibited predatory behavior and potential trouble. The bear held its head low, growled softly, walked lightly and once eye contact was made, made popping noises with its teeth. The bear had entered an area normally protected by closed gates, cornering Marshall whose only hope of defense was the shovel he used on the job. But it proved useless against an animal as quick as a bear and the man and beast went back and forth trying to gain ground. Finally, Delroy Walburger, who worked at the nearby Alpine Stables, pulled up to the incinerator to unload some garbage and unknowingly scared the bear off. It was a happy ending to an encounter. Marshall, who learned to recognize many bears as repeat visitors, never saw that bear again. And for reasons still unknown to him, he admits he never told the wardens about the incident.

Park visitors, keen to catch sight of a “real live bear”, often went to the incinerator to watch the animals, particularly at dusk. While visitors considered this a benign activity when done from a vehicle, it was frowned upon by park officials who were responsible for public safety. One such visitor arrived during working hours, asking Marshall where the bears were and when they might show up. Marshall explained the bears were free to roam but were generally chased away from the garbage area. The disappointed visitor had assumed the incinerator was a feeding site and demanded to know why then, if that was not the case, the garbage “was cooked,” not aware that burning of garbage was a method of disposal.¹⁶

After more than 20 years of use, and because of increasing bear encounters near the facility, and at nearby Alpine Stables and Camp Columbus, the incinerator was replaced by a solid waste transfer station (SWTS) on the advice of a consulting engineering firm and Parks Canada’s Western Regional Office as part of the Park Master Plan.¹⁷ Built at the Upper Compound, the SWTS structure was one part of a new plan to haul garbage outside the park. New custom-made bear proof garbage receptacles, designed and built by Haul-All Equipment of Lethbridge, were the other part of the plan. These bins, the first of their kind in Canada, were installed incrementally throughout the townsite and at major locations in the park beginning in 1989.¹⁸ They securely contained the garbage, preventing bear access, until the special dumping trucks, adapted for these containers, made the rounds to empty them.

The Waterton Green Team, a volunteer group of more than 20 year-round and summer residents, was established in 1995, and encouraged recycling through use of a dedicated recycling trailer in the townsite and another later at Crandell campground as well as 35 blue boxes for bottles and cans which were installed in the front country. A provincial grant paid for these additions but dealing with the contents of the receptacles took dedication. These activities helped keep specified items out of the garbage stream including cardboard, beverage containers, newspapers and office papers, plastics and food cans.¹⁹ When the Green Team dissolved, *circa* 2010, Parks Canada took over responsibility for the recycling trailers.



¹ W. F. Lothian, *A History of Canada's National Parks*, (Ottawa: Parks Canada, 1976) Volume II, 33.

² Visitation statistics, Waterton Lakes National Park working document available from WLNP Visitor Experience section.

³ Elizabeth Moxley and Edward Atkinson, researchers, *Historic Buildings Inventory, National Parks. Elk Island, Waterton Lakes*, 1988, Canadian Parks Service. Although this document indicates a new incinerator was built in 1920, no description or location is given. Their reference documents are: PAA, Acc. 70, 190/295, W56-2. It is likely that the "incinerator" was simply a dump-and-burn operation and did not have a structure associated with it.

⁴ Chris Morrison, *Waterton Chronicles, People and Their National Park*, (Lethbridge: Goathaunt Publishing, 2008), 35-46, 133-242.

⁵ "Wonderful Waterton," *Lethbridge Herald*, Aug. 4, 1924, 5. WLNP Archives, Box 130, Item 1.

⁶ E. K. Goble, "Waterton Park History," (unpublished manuscript, 1981), 15; Box 115, Item 7.

⁷ National Parks of Canada: Report of the Commissioner, Year Ended March 31, 1930 (Ottawa: King's Printer), 1931, 19. WLNP Archives, digital files under "Superintendent's Report."

⁸ It was located on the northwest quarter of section 25, township 1, range 30 west of the 4th meridian, approximately 1.6 kilometres from the entry road and about three kilometres from the townsite, WLNP Archives, Box 238, no item number.

⁹ Hugh Buck, "Wonderful Waterton Whimsies," *Lethbridge Herald*, Aug. 20, 1937, page 11. WLNP Archives, Box 130, Item 1.

¹⁰ "Mother Bear, Cubs Shot at Waterton," *Lethbridge Herald*, July 29, 1960, front page. WLNP Archives, Box 130, Item 1.

¹¹ "Bear Proof Garbage Cans," *Lethbridge Herald*, Jan. 24, 1961, page 5. WLNP Archives, Box 130, Item 1.

¹² Superintendent's Quarterly Report, Oct. 1 to Dec. 31, 1962; WLNP Archives, Box 208, Item 5.

¹³ Superintendent's Quarterly Report, April 1 to June 30, 1963; WLNP Archives, Box 208, Item 6

¹⁴ "Finish Construction of Park Incinerator," *Lethbridge Herald*, April 3, 1963, 6. WLNP Archives, Box 130, Item 1.

¹⁵ "Finish Construction of Park Incinerator," *Lethbridge Herald*, April 3, 1963, 6. WLNP Archives, Box 130, Item 1.

¹⁶ Interview by Chris Morrison with Locke Marshall, July 31, 2015, WLNP Archives, Box 130, Item 1.

¹⁷ Report: User Requirements for a Solid Waste Transfer Station at Waterton Lakes National Park, 1984, WLNP Archives, Box 162, Item 15.

¹⁸ Email to Chris Morrison from Allan Nelson, WLNP, acting assets manager, Aug. 5, 2015; WLNP Archives, Box 130, Item 1.

¹⁹ *Chronology of Significant Events in Waterton Lakes National Park*, WLNP Archives, prepared July, 2015. Box 231, Item 1.