

Making the Yukon College Neighbourhood Bear Safe

Actions Taken During the 2015 Season

Scott Gilbert – December 11, 2015

In the fall of 2014 staff from Yukon Environment visited Yukon College and met with the President to discuss recent cases of bear problems that had been reported on campus. In response a report titled, *A Bear Risk Assessment for Yukon Place: Plans to Make the Yukon College Neighbourhood Bear Safe*¹, was commissioned, funded by the YC Faculty Research Fund and released in June, 2015. The focus of the report was expanded beyond Yukon College to include three neighbouring institutions located at Yukon Place: Yukon Archives, the Yukon Arts Centre (YAC) and the Seniors' Residence operated by the Yukon Housing Corporation (YHC). The bear risk assessment laid out a variety of management alternatives that were designed to reduce human-wildlife conflicts.

Much work has been done at Yukon College since the report was released and the purpose of this update is to record the actions taken by Yukon College specifically during 2015. The report summarizes the various management directions that were adopted, provides a time line detailing the specific actions taken by various departments within the College and provides a summary of plans for the 2016 season. An appendix provides the minutes of a meeting held on December 2, 2015 to discuss lessons learned during the past year and plot strategy for the future.

Management Actions to Reduce Human-Bear Conflicts

Yukon College moved quickly to start taking action based on the *Bear Risk Assessment for Yukon Place* report. The most pressing issue concerned solid waste management on campus and the administration, after considering the six alternatives for waste storage, adopted a strategy of reducing the number of dumpsters where possible, locating three large dumpsters behind an electric bear fence at the Kitchen Service entrance and placing an order for a bear-proof dumpster with a self-locking lid for the 520 College Drive building. Several other new approaches to reducing human-bear conflicts were implemented (Table 1).

¹ Available at: https://www.yukoncollege.yk.ca/research/project/a_bear_risk_assessment_for_yukon_place

Table 1: Summary of management alternatives adopted by Yukon College

Task	Comments	Follow-up for 2016
Solid waste		
Reduce the overall number of dumpsters, build an electric fence enclosure to protect dumpsters at the Kitchen Service entrance and install a bear-proof dumpster in front of 520 College Drive.	Completed	Monitor effectiveness of latch on bear proof dumpster
Maintenance of electric fence taken over by YC Facilities while day to day operation of the fence overseen by safety and Security staff.	Completed	Add warning sign to gate at Kitchen Service Entrance; begin operation by April 15
Existing dumpsters at Upper & Lower Trades left in place with warning sign about not disposing of bear attractants.	Requires further monitoring	Assess and respond if necessary
Compost Storage		
Acquire and install bear-resistant compost cart.	No composting collection currently occurring at the 520 building	Develop outside compost storage for 520 building as necessary
New 3 yd ³ conventional dumpster installed at the Kitchen Service entrance and protected by electric fence.	Completed	
Vegetable Garden / Greenhouse		
2 sections of temporary electronetting fencing purchased; one for the Campus Housing vegetable garden and one for an adjacent greenhouse; fence is portable and runs on a solar powered charger.	Electronetting was set up around the Campus Housing garden and tested but never commissioned in 2015; taken down for the winter	Set up electronetting fence around garden and greenhouse when ground thaws; add new warning signs
Public Education		
Marilou Aguillon, a student in the YC Multimedia Communication program, developed the <i>Bear in Mind</i> messaging theme with templates for brochures, posters and signage.	Completed	
Campus Housing used the <i>Bear in Mind</i> materials to support orientation.	Completed	Assess and revise as needed for 2016
Regular Bear Safety Audits		
Develop an institution-specific checklist of potential bear attractants that can be monitored during routine checks between April and October.	Completed. (Site visit with Yukon Environment staff in July)	Safety and Security staff to carry out audits in spring, early June and September when Campus Housing tenants move in.
Record keeping of campus bear sightings		
Share information about bear sightings via email with Yukon Place neighbours	Completed	
Keep track of number of wildlife (bear sightings) on campus and number of referrals to Conservation Officers at Yukon Environment	Completed	

Annotated 2015 Timeline

May 1 - "Bear in Mind" brochures were placed in brochure rack in Campus Housing foyer at 500 College Drive and displayed at 510 College drive. "Bear in Mind" posters were placed in strategic areas of Campus Housing including all the Campus Housing Buildings at 500 College Drive, 510 College Drive and 520 College Drive.

May 20 - Copy of "Bear in Mind" brochure send to Westmark's office to be included in their employee orientation. The orientation included employees who would be staying in Campus Housing over the summer months.

June 15 - Safety and Security staff begin tracking the number of wildlife sightings on campus as well as the number of bear incidents that involve referrals to the Conservation Officer Services.

June 15 – Campus Housing staff continued their practice of previous years of placing bear warning posters on all entrance and exit doors to/from Campus Housing buildings to alert occupants of where and when the bear sighting occurred.

June 18 – Site visit at YC with General Waste Management and YC places request to replace 6 cubic yard dumpster in front of 520 College Drive with bear-proof dumpster.

June 24 – Several dumpsters removed from campus and three 6-yard dumpsters located behind Kitchen Service Entrance where an electric bear fence will be erected.

July 16 – Safety and Security staff set up a new email distribution list that includes campus neighbours (Yukon Archives, Yukon Arts Centre and Yukon Housing Corporation's contact for the Seniors' Residence) so that information about bear sightings on campus can be shared.

mid-July – Copy of the Bear Risk report passed on to YG's Facilities Management for their review and consideration (e.g. garbage bins in parking lots, ornamental fruiting trees at Yukon Place).

July 19 – Electronetting fence set up around the perimeter of the Campus Housing garden plot near 510 College Drive. The fence is never actually put into operation during the season.

July 21 – Yukon Environment staff (Ken Knutson and Ramona Maraj) join YC staff from Student and Infrastructure Support in a walking tour of the campus to develop a checklist for bear safety audits.

July 22 – Facilities staff respond to safety audit by removing garbage cans from smoking areas, bus shelter, the service entrance to T1090 and children's playground. Requests for signage submitted. Campus Housing staff respond by cleaning BBQs and adding them to a weekly checklist for follow up.

July 28 - Media release sent out: Yukon College taking action to reduce human-bear

July 28 – CBC Radio interview with recent RRM graduate Andrew Smith about plans to reduce human-bear conflicts at Yukon Place.

July 29 – Yukon News article, "Yukon College makes bear-proofing plans" published.

Annotated 2015 Timeline (continued)

August 10 – City of Whitehorse compost polycarts removed from the Kitchen Service Entrance and Shipping Receiving area and replaced with a 3 cubic yard dumpster provided by GWM as part of a City of Whitehorse trial. The new compost dumpster is not bear proof and is located behind the bear fence outside the Kitchen Service Entrance.

August 14 – *Whitehorse Star* article, “Yukon College taking action to reduce human-bear conflict” published.

August 17 – Electric fence surrounding the Kitchen Service Entrance commissioned and daily operation is overseen by Safety and Security staff.

September – During Student Orientation Week the staff from Student & Infrastructure Support distributed Student Agendas that included some “*Bear in Mind*” information.

September – *Bear in Mind* signage added to the Trades dumpsters.

September 23 – YC student was hired to remove the brush and vegetation from around the 510 College Drive building to improve sightlines.

October 4 – Concern raised by a resident in the NRI staff house about garbage being left at Roddy’s Camp; a bear-proof garbage container was added to the capital budget request and Safety and Security added occasions checks of the site during their rounds as an interim measure.

November 18 – GWM provides new bear-proof dumpster for 520 College Drive.

November 30 - Electric bear fence at the Kitchen Service Entrance is turned off for the winter – the date was extended twice during the fall after consultation with the Conservation Officer Services who reported bear activity had been prolonged by the warm weather and lack of snowfall.

Lessons Learned During the 2015 Season and Plans for 2016

Many of the ideas presented here were raised by staff members or emerged during the discussion at a meeting convened by Colleen Wirth on December 2, 2015.

Kitchen Service Entrance: Gene Batten said the implementation of the electric fence had been satisfactory; he suggested that we add warning signs to the gate to alert people when the fence is in operation. Randy Spinks explained that the compost dumpster would likely be exchanged for a larger unit. Randy stated that there is a capital request underway to obtain funds to do some excavation at the Kitchen Service entrance so the large dumpsters will be at a height that is easier for staff to access and make more room within the fenced area.

Bear-proof dumpster at 520 College Drive: There was wide-spread frustration that the bear-proof unit took almost 5 months for delivery. Colleen Wirth suggested we review the service aspect of the College's solid waste contract (up for a renewal or one year extension in June). Doug Clark raised some concerns with the "self-locking" mechanism on the new dumpster and reported that it doesn't lock every time and he worries how ice may affect the mechanism. Doug pointed out that the industry standard is the Haul-All Equipment System (in use in Faro and Carcross). Yukon Environment is advocating locally with the City of Whitehorse to encourage the introduction of that (expensive, proprietary) system. The College might be able to use its role as a consumer to facilitate early adoption of the Haul-All system if there was sufficient demand among other users in Whitehorse.



Figure 1. Dumpster at 520 College Drive with bear-proof self-locking access lids.

Education: There was considerable discussion about the role public education could play in encouraging bear safe practices at Yukon College. Doug Clark cautioned us that it is critical to understand the multiple audiences one might have to target and, as a warning, stated that the academic literature shows some dismal results when researchers actually investigated how effectively bear safety messages were communicated. Erin Johnston provided a personal insight that basic information such as tips about travelling in bear country can be very effective if they reach the appropriate audience.

So where should our education efforts be targeted? Randy suggested that bringing in a Conservation Officer is often effective (their uniform brings some gravity to the presentation) so perhaps it could be made part of the September Student Orientation. Randy also offered the example of the Scavenger Hunt that is organized by the Registrar's Office and perhaps next year it could include some "Bear in Mind" content. Doug offered to work with a Yukon student on a research project to develop a profile of the audience for bear safety messages present at Yukon College. Work is underway to bring on a Renewable Resources Management student from last year who is interested in carrying out a Directed Studies on some aspect of public communication related to bear safety and perhaps signage for the numerous trail heads that surround the campus.

NRI House: Clint Sawicki has agreed to add some information to the User Agreement that tenants sign prior to a stay at the NRI house (located near the Campus Housing garden). This would provide prospective tenants with advance warning that during the growing season there will be an electric bear fence in operation.

Managing natural attractants: Students in the Renewable Resources Management program spent an afternoon tagging soapberry bushes along the campus perimeter between Roddy's camp and the Seniors' Residence. The bushes will be moved off site and transplanted next May at the start of the growing season.

Policy and Procedure: Doug suggested the College might be prudent to develop some operational guidelines and procedures regarding bears and wildlife. The brochure developed last year for students in Campus Housing delineated the lines of responsibility and identified who to contact when dealing with bears on campus (Figure 2.)

Work Load Implications of Bear Safe Actions: There was a brief discussion about how various staff members and departments had been affected by the changes from the new *Bear in Mind* approach. While most agreed there had been more work involved in making the changes during the first season most people felt that the lasting legacy would be minor with the exception of staff in Safety and Security. They have new and important roles to play in operating the electric bear fence, carrying out safety audits with appropriate follow-up, as well as tracking reports of bear sightings and sending out communications. Facilities staff will also see some long term impact as they face additional responsibilities for setting up and taking down bear fences.

Solid Waste Production: Managing bears risks has brought much greater attention to the way we process and store solid waste on campus. The College has reduced the impact of its waste production in three ways: (i) reduced the total number of dumpsters, (ii) increasing the number of dumpsters that are only serviced on request (based on waste accumulation) and, (iii) although hard to quantify, there was a feeling that there has been a reduction in the amount of “unauthorized” dumping of domestic garbage by members of the public (or staff). The locations of the new dumpsters and the practice of using locking lids has curtailed opportunities for afterhours “illegal” dumping.



Figure 2. This excerpt is from a 6-panel brochure, prepared by Marilou Aguilon from the Multimedia Communication program and was distributed to students staying in Campus Housing. The list of contacts identifies the appropriate authorities to contact when dealing with bear issues.