

# Skagway Road Outreach Report

## Summer 2017



Prepared by:  
Aja Mason, B.Sc., Contractor  
Centre for Human Wildlife Conflict Solutions  
(Wildwise Yukon)  
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## **Introduction**

Each year tens of thousands of visitors travel along the Skagway Road, an incredibly scenic highway that connects Skagway, Alaska with Carcross, Yukon. Carved through the Coast Mountain range and through Carcross Tagish First Nation (C/TFN) traditional territory, the Skagway Road also runs through prime black and grizzly bear habitat. In the summer months, tourism brings many people to this region who are unfamiliar with “bear etiquette”. Many stop in dangerous areas along the highway to view and interact with wildlife. In turn, wildlife such as bears become habituated to humans and in some situations, potentially conditioned to associate humans with food. In recent years, there has been an increase in the frequency of conflict between bears and humans in this area, which has led to the euthanizing of aggressive bears – an outcome that could be prevented with more education. To this end, Wildwise Yukon in collaboration with C/TFN and Environment Yukon set out to educate people traveling along the Skagway Road using signs, brochures and outreach. Over the course of the summer, we also gathered information regarding the extent of knowledge of bear habituation and food conditioning using surveys with the possibility that the outcomes might shape future outreach and education campaigns. We approach this as an opportunity for research, collaboration and learning with the intent that we come to understand why there is a problem and how our efforts can best be directed in the future to reduce human-bear conflicts.

## **Background**

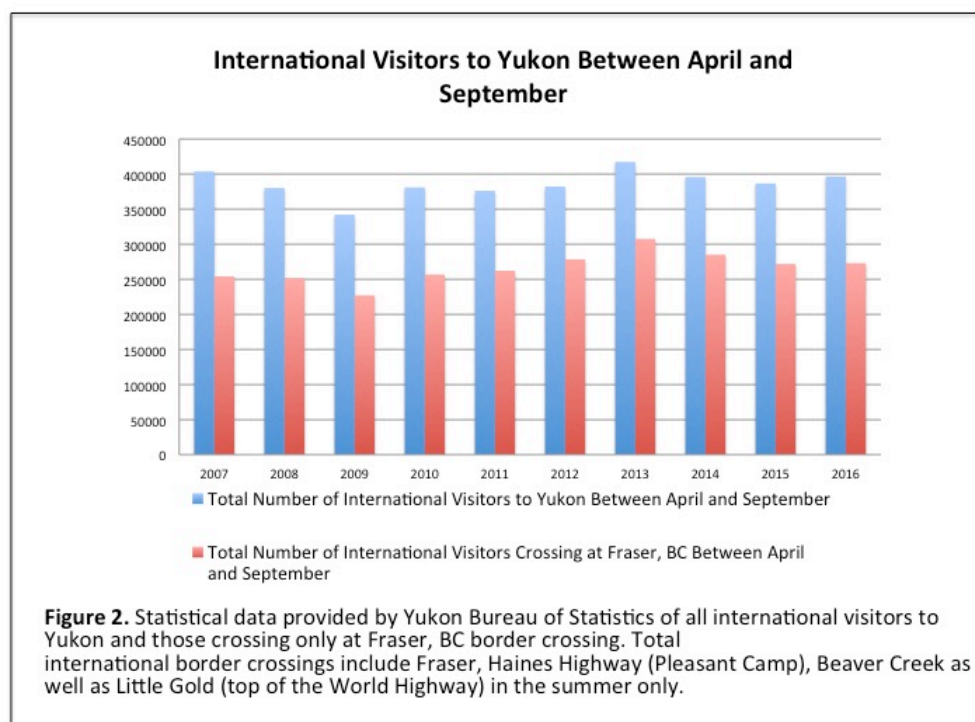
### Environmental Factors:

Locals noticed that the spring of 2017 had a late green up in the Yukon. A late green up means that there is a scarcity of the naturally occurring food sources for bears in and around their natural habitats. In the spring, Yukon Highways and Public Works clear a buffer zone on either side of Yukon highways in an effort to ensure that drivers will be able to have a clearer view of large wildlife that may be near the highway. Bears will often forge for and dig up roots, for example dandelion roots, in freshly trimmed ditches and will do so especially when access to roots is made more available through trimming of the ditches and when green up is late.

### Tourism along the Skagway Road:

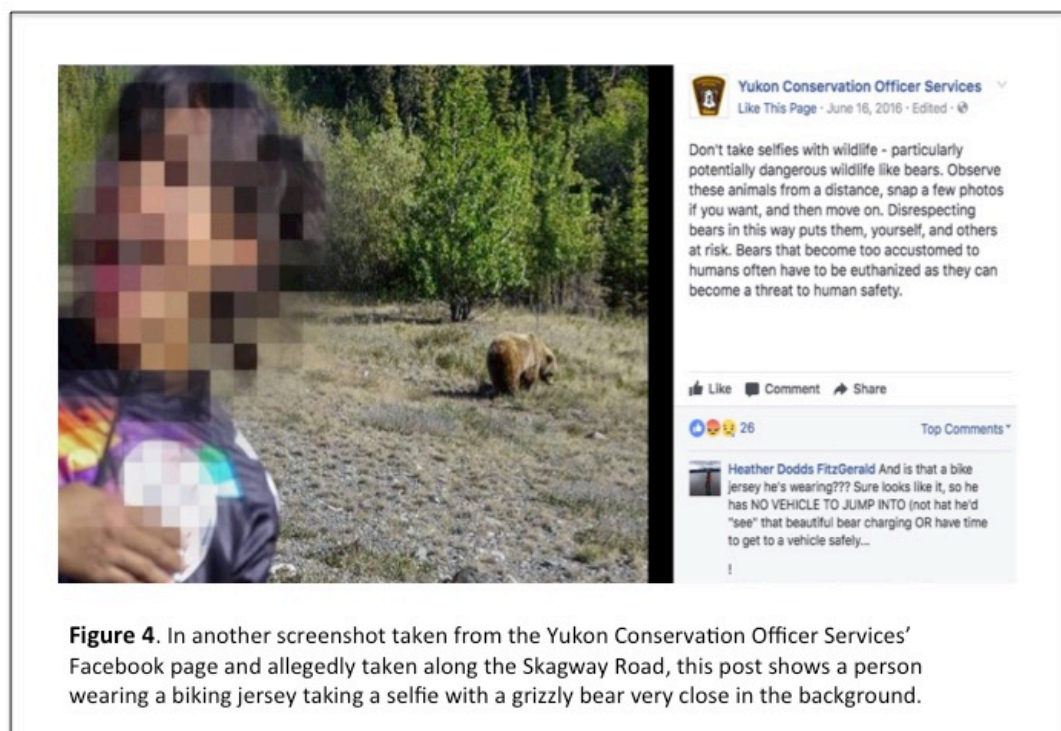
In comparison to 2016, the 2017 cruise ship season was extended by two weeks bringing in an estimated 810,000 people by cruise ship to the port of Skagway (Skagway Cruise Ship Calendar, 2017). Over 95% of Skagway’s Budget Avis Car

Rental clientele use the vehicles they rent to drive down the Skagway Road - often with the hopes they will glimpse wildlife. In addition, there are over 20 Skagway based companies offering bus and vehicle based Skagway Road tours. According to the Municipality of Skagway Borough website, another 100,000 tourists venture to Skagway from the lower 48 and Canada in their own vehicle via the Skagway Road (2017). In comparison, as seen in Figures 1 and 2, the Yukon Bureau of Statistics in Whitehorse reported that the Canada/US border crossing at Fraser, BC counted 285,001 international visitors crossing into Canada from the US in 2016 (Brown, G. personal communication, August 31<sup>st</sup>, 2017).

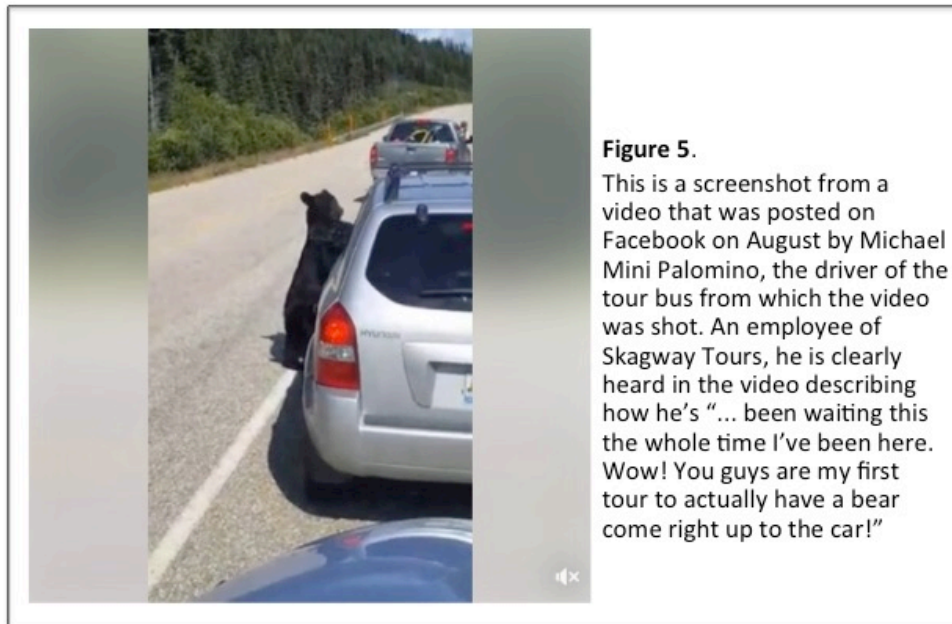


### Reports of Food Conditioned Bears along Skagway Road:

A major impetus for this outreach project stems from anecdotal reports of vehicles and tour buses stopping to allow people to take pictures of bears, and in some cases, people directly feeding bears. While I have not been able to obtain direct or online photographic or video evidence of bears being fed by humans, there has been evidence of encounters with food-conditioned bears (or bears in the process of becoming food conditioned/habituated) posted on social media (see Figures 3 through 7).

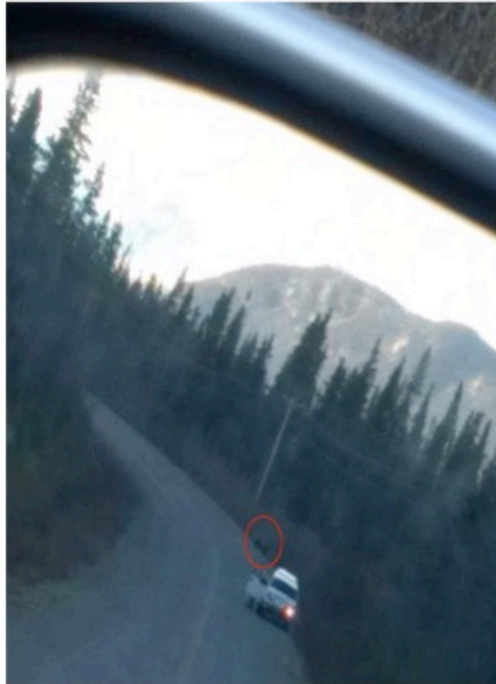






As seen in Table 1, Yukon Conservation Officer Services were called out to the Skagway Road 11 times to destroy bears that were deemed a nuisance or to clean up carcasses of bears that had been killed in motor vehicle accidents.





**Figure 7.** This photo, taken in May of 2017 on Tagish Road approximately 10 kms NE of Carcross was provided by one of the vendors working at the Carcross Commons. There is a white truck stopped with a person getting out of the passenger side, and two black bears in the background.

| Location           | Animal                   | Cause of Death            |
|--------------------|--------------------------|---------------------------|
| Carcross           | Coyote                   | Destruction by COS        |
| Carcross           | Deer                     | MVA                       |
| Carcross           | Deer                     | MVA                       |
| Carcross           | Deer                     | MVA                       |
| Carcross           | Deer                     | MVA                       |
| Carcross           | Moose                    | Destruction by COS        |
| Emerald Lake       | Black Bear               | MVA                       |
| Emerald Lake       | Orphaned Black Bear Cubs | (Translocated to Skagway) |
| Spirit Lake        | Coyote                   | MVA                       |
| Crag Lake          | Black Bear               | Destruction by COS        |
| Carcross           | Black Bear               | Destruction by COS        |
| Carcross           | Black Bear               | Destruction by COS        |
| Bove Island        | Black Bear               | MVA                       |
| Carcross           | Black Bear               | Destruction by COS        |
| Crag Lake          | Black Bear               | Destruction by COS        |
| Km 86 Skagway Road | Black Bear               | MVA                       |
| Carcross           | Black Bear               | Destruction by COS        |

**Table 1.** Aaron Koss-Young with Yukon Conservation Officer Services provided this year-to-date (August 31<sup>st</sup>, 2017) summary of wildlife killed along the Skagway Road on the Yukon side of the US/Canada Border. MVA stands for Motor Vehicle Accident and COS stands for Conservation Officer Services.



## Survey Methods

Between May 31<sup>st</sup> and September 5<sup>th</sup>, 2017 an anonymous survey of visitors (Appendix A) was used to assess the number of wildlife encounters, in particular, those with bears along the Skagway Road. Participants were asked if they had seen any tour buses pulled over on the road, or if they had seen anyone approaching or giving food to bears. Participants were also asked where they were from and what their level of experience was around bears. Two questions in the survey were aimed at gaining an impression of what people's understanding of food conditioning and habituation are. Lastly, participants were asked if they had read brochures or other educational materials regarding bear safety, if they had had encounters with bears previously, if they carried bear spray while hiking or camping, and if they had ever had a hunting license.



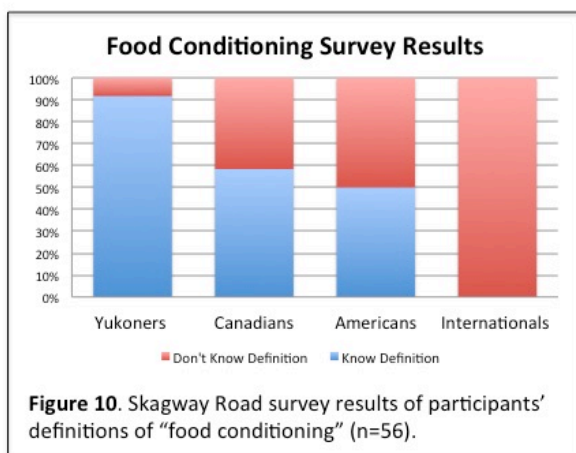
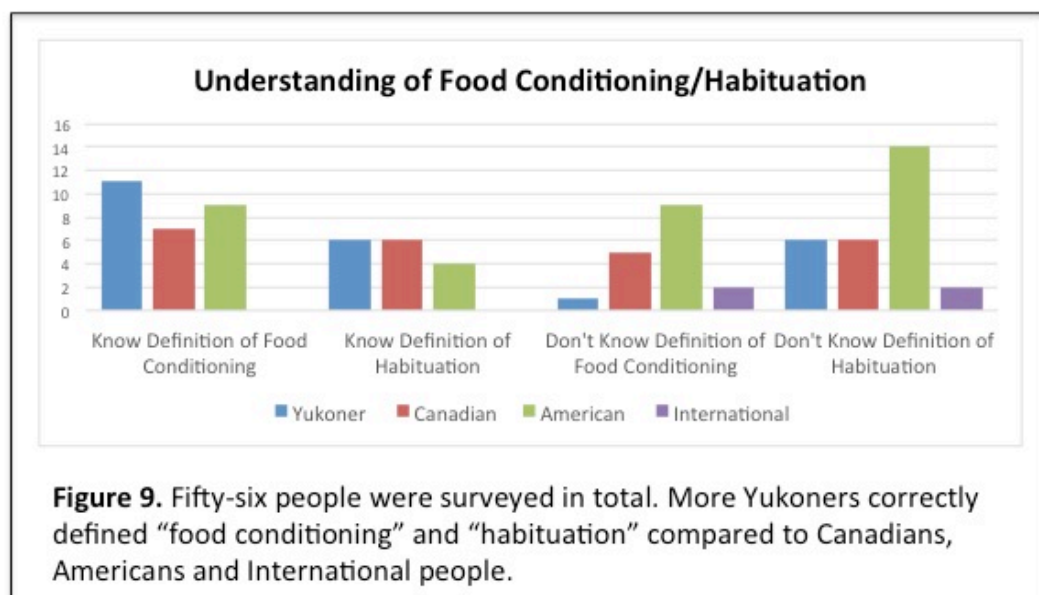
Responses to the questions “What does the term food conditioning mean to you?” and “What does the term habituation mean to you?” were compared to the technical definitions used by bear biologists:

Food Conditioning: Conditioning of bears to foods of humans (McCullough, 1982).

Bear Habituation: The loss of fear of humans through lack of negative reinforcement [and] can occur where bears and humans come into frequent, innocuous contact and is not necessarily dependent upon food conditioning. (McCullough, 1982).

## Survey Results

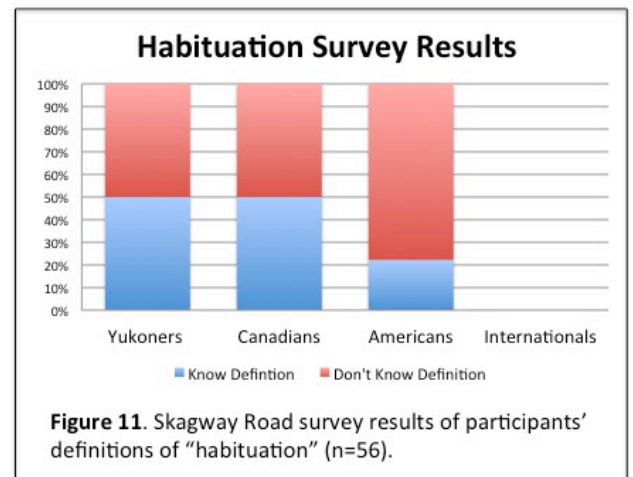
In total, 56 participants were surveyed. The majority of responses were collected at Carcross Desert. Of the 56 respondents, only 20 reported seeing bears. Not a single respondent reported seeing a tour bus stopped on the road. The single respondent who reported seeing a person leaving food along the side of the road was a local Yukoner who said she'd seen someone in the morning throwing a banana peel into the ditch from their car window. As seen in Figure 9, American and International respondents indicated an absence of knowledge of the terms food conditioning and habituation in comparison to respondents from Yukon and Canada.



Over 90% of Yukon participants surveyed indicated that they understood what food conditioning meant while about 56% of Canadians and 50% of Americans demonstrated an understanding of the concept (Figure 10). None of the international people surveyed could define food conditioning.

Over 50% of Yukoners responded with a correct definition of the term

“habituation” while less than 40% of Canadians and less than 25% of Americans could define the term accurately (Figure 11).



## Outreach

### Deliverables

The 2017 Skagway Road outreach involved the distribution of 1100 brochures (Appendix B), 11 signs (Figure 12 and Appendix C) and the completion of 56 surveys (Appendix A).



Budget Avis Car Rental in Skagway, AK took our outreach campaign quite seriously and assisted by creating a large collage with the outreach materials (Figure 13).



### Outreach challenges:

Of the 11 signs that were given to C/TFN to install, 5 were stolen. There were a couple of encounters with local people who indicated that this joint outreach campaign posed a threat to Yukon's tourism industry. The wording "Do not stop for bear viewing" although defined by C/TFN, raised concerns with Yukon's Department of Tourism and Culture as well as Environment Yukon as being a message that was worded too strongly. In response, Environment Yukon, C/FTN and Wildwise coordinated a re-wording of the signs by applying stickers that read: "Do not stop on road. Stay in vehicle to view bears". These stickers were put onto the remaining 6 signs.

### **Suggestions**

Respondents of the survey made several suggestions regarding food conditioning/habituation of bears and roadside safety. One suggestion that came up was the idea of installing signs that communicate to drivers to "haze" or honk their horns at any bears they see on the side of the road with the intention of aversively conditioning the bears to the road. Another suggestion involved creating a Facebook page or other social media site dedicated to uploading pictures of people and vehicles interacting with bears. This site could be a place where, for example, pictures of license plates, vehicles or people behaving and interacting inappropriately with bears along roads in the Yukon could be shared publicly.

A couple of the tour bus drivers mentioned an education gathering that happened in Skagway in the spring of 2017 which was organized by one of the Skagway Traditional Council members that would be useful for WildWise to collaborate with.

Despite claims from many of the tour bus drivers that they receive training regarding bear behaviour, perhaps targeting these businesses in both Skagway and Whitehorse would be a useful strategy for future outreach.

Of further concern, the Casino Mine, which is still in the environmental assessment stages, is slated to open as early as 2019. According to the Yukon Development Assessment Branch, the route for export of materials extracted by this mine is slated to be the port in Skagway pending port infrastructural improvements. A large increase in ore-truck traffic along Skagway Road could have untold impacts for bears along the corridor.

Finally, Yukon could benefit from having a centralized database of wildlife encounters. Currently, the TIPP line is the main channel for which human interactions with wildlife get reported although there may be some public perception that the phone line is only for turning in poachers. For the purposes of establishing baseline metrics and having the means to assess potential impacts over time as a result of increased traffic along the Skagway Road, an improvement would be to have some kind of centralized reporting system of the number of bears or wildlife encounters (Carter, n.d.).

## References:

A. Koss-Young, personal communication, August 20<sup>th</sup>, 2017.

Carter, A. S. (n.d.) Biodiversity Indicators for Monitoring Impacts and Conservation Actions. *The Energy and Biodiversity Initiative*. Retrieved from <http://www.theebi.org/pdfs/indicators.pdf>

McCullough, D.R. (1982). Behaviour, Bears, and Humans. *Wildlife Society Bulletin*. Vol. 10 (1). Retrieved from <http://www.jstor.org/stable/3781798>

Municipality of Skagway Borough. (2017). *Annual Visitor Statistics*. Retrieved from <http://www.skagway.org/cvb/page/annual-visitor-statistics>

Skagway Cruise Ship Calendar. (2017). Retrieved from: <http://skagway.com/discover-skagway/cruise-ship-calendar/>

Borwn, G. Yukon Bureau of Statistics, personal communication, August 30<sup>th</sup>, 2017.

Yukon Development Assessment Branch, personal communication, September 1<sup>st</sup>, 2017.

## Videos:

Video of black bear from tour bus:

<https://drive.google.com/open?id=0Bx0-N3eU-nM9VGplemh5bGI2dXM>

Video of tour buses pulled over:

<https://drive.google.com/open?id=0Bx0-N3eU-nM9VUpaNnBJWm54NUk>

## Appendix A – Outreach Survey

### **Survey & Consent Form – Investigating Bear Awareness Along the Skagway Road**

This is an anonymous survey being conducted by a student researcher at Yukon College in collaboration with WildWise Yukon. The purpose of this survey is to learn more about the experience that travellers on the Skagway Road have had while viewing wildlife, and in particular, bears. Your feedback will be used to develop a better understanding of the areas along the Skagway Road that are most prone to human wildlife conflicts and used to inform both current and future education campaigns to reduce human wildlife conflicts. This anonymous data will be kept indefinitely. You may choose not to participate in this survey for any reason. The survey will take approximately 5 minutes to complete. If you have questions about the survey or associated research project please contact Aja Mason [aja.mason@gmail.com](mailto:aja.mason@gmail.com) or Scott Gilbert [sgilbert@yukoncollege.yk.ca](mailto:sgilbert@yukoncollege.yk.ca) ; 867-668-8776. By completing and submitting this survey, your free and informed consent is implied and shows that you understand the above conditions of participation in this study.

1) a) Have you seen a bear or any other wildlife along the Skagway Road? **(Y/N)**

b) What kind of wildlife did you see? \_\_\_\_\_

c) Where approximately did you see the wildlife? \_\_\_\_\_

2) Did your tour bus pull over along the shoulder of the highway to view wildlife? **(Y/N)**  
Where? \_\_\_\_\_

3) Have you approached or seen anyone approaching a bear or other wildlife while on the Skagway Road? **(Y/N)**

4) Have you seen anyone leaving food for wildlife along the Skagway Road? **(Y/N)**

5) What does the term “food conditioning” mean to you?



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6) What does the term “habituation” mean to you?

Please check one:

Yukon Resident \_\_\_ Canadian Visitor \_\_\_ US Visitor \_\_\_ International Visitor \_\_\_

Level of experience around bears:

None \_\_\_ Not much \_\_\_ Some \_\_\_ Extensive \_\_\_

Please check all that apply:

- a. I have read bear safety materials (brochures, flyers, booklets etc.)
- b. I have had a bear encounter while camping or hiking in the past (not including sightings)
- c. I carry bear spray when I camp or hike
- d. I have, or had at one time, a hunting licence

Thank you for your time!

## Appendix B – Outreach Brochure

### Help us keep bears and people safe.

Bears are fast learners. If they've been fed by a human, or if they've found food along the side of a highway, they quickly learn that humans and highways are sources of food.

This "food conditioning" has a devastating impact on bears because once they make such an association, they can become aggressive toward people.

Bears that are become comfortable being around people usually end up being destroyed.



### Please contact us right away if you see:

- a bear that appears to be food conditioned or approaches vehicles or people
- a person feeding a bear or throwing food onto the side of the road. Take down their license plate number.

**In case of an emergency, report to  
Carcross/Tagish First Nation:  
867-332-0290  
Toll free 1-855-686-4251**

All photos: Peter Mather



## RESPECT OUR BEARS



You are on the Traditional Territory of  
Carcross/Tagish First Nation.

We value the bears that live here.  
Environmental monitors strictly patrol this area.

**Do not feed or get close to bears.**

### Do not stop your vehicle on the highway:

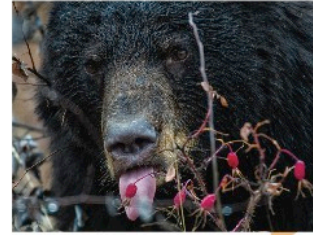
- Stopping on the road is very dangerous for other vehicles
- Pulling off onto the shoulder of the road is not a safe option
- Huge trucks drive on these highways and cannot stop quickly
- Bears can become habituated to vehicles

### The only safe way to view bears is on a roadside pullout:

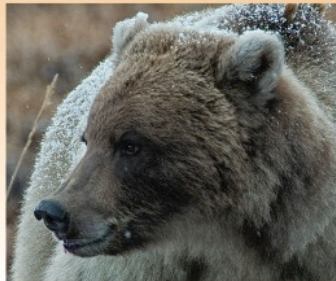
- There are pullouts along the highway meant for viewing scenery and wildlife.
- If the bear retreats, or seems to ignore you, then it is safe for you to take pictures from your car. Watch for a minute, and then move on. Watching for only a minute will prevent the bear from becoming habituated to your presence.
- If the bear approaches your vehicle then leave immediately. This bear may be conditioned to being around people and could be dangerous. Depending on how aggressive the bear was, **report the incident to Carcross/Tagish First Nations by calling 1-855-686-4251.**

### The Carcross/Tagish First Nation respects bears.

Bears are sacred to us. We don't make an attraction out of them. We don't harass them or feed them. We give them space.



Bears come out to roadside edges to eat flowers, berries, plants and gophers. Or just for the easy walking.



### Feeding bears is against the law

Bears in the Yukon are protected under the *Wildlife Act*. Creating a nuisance bear or harassing bears is a chargeable offence.

Feeding bears, or leaving food or garbage in a place where bears may get it, puts bears and people in danger. It is against the law.

## Appendix C - Signage



You are on the Traditional Territory of the Carcross/Tagish First Nation

### Do Not Stop For Bear Viewing

Please show respect: don't feed or get close to the bears

**A Fed Bear Is A Dead Bear**



