WildSafeBC Annual Report 2021 Pacific Rim Region

Prepared by: Bob Hansen, WildSafeBC Pacific Rim Coordinator





















Executive Summary

This report describes the activities of the WildSafeBC Pacific Rim Program activities between April 1 and November 30, 2021. The Program is situated on the unceded traditional lands of the Ahousaht, Tla-o-qui-aht and Yuułuʔiłʔatḥ First Nations. It includes the communities of the Ahousaht First Nation – Ahousaht, Tla-o-qui-aht First Nation – Opitsaht – Esowista – Ty-histanis, District of Ucluelet, and District of Tofino (Figure 1).

There was considerable wildlife activity in all communities of the region throughout the season from April 1, 2021, to November 30, 2021. Black bear reports began increasing in July, dipped slightly in August, and then increased steadily through the fall. Reports to the Conservation Officer Service's 24/7 Report All Poachers and Polluters (RAPP) line showed:

- Bear reports up over 700% from 44 in 2020 to 325 in 2021
- Cougar reports the same with 12 in 2020 and 12 in 2021
- Wolf reports down from 14 in 2020 to 4 in 2021

The WildSafeBC Community Coordinator (WCC) performed outreach activity with the goal of preventing conflict with wildlife in the program area. Following COVID-19 safety precautions, several of the standard WildSafeBC program activities were modified to ensure proper sanitization and physical distancing measures were in place.

- 8 WildSafe Ranger presentations given and over 195 youth and teachers reached
- o 12 presentations given to community groups and over 130 participants
- Over 400 people reached through leaving door-to-door education packages at residences in 3 communities
- There were 3 bin tagging outings and a total of eight bins tagged
- 2 display booth days and over 300 people reached
- 38 Facebook posts and 253 new Facebook page followers from January 1, 2021, to date; an increase of 28%
- 1 business completed the WildSafeBC Business Pledge process, and 5 others started the process
- 2 campgrounds implemented the Bare Campsite Program (BCP) and staff of 3 other campgrounds participated in a BCP training workshop

A broad scope of human-wildlife conflict prevention activities was undertaken with a focus on education, provision of training, and on facilitating implementation of conflict prevention infrastructure. Conflict prevention activities included:

 Communication, education, collaborations and information sharing with a network of sponsors, partners and residents to further conflict prevention

- Operational coordination and information sharing with the Conservation Officer Service (COS), bylaw services, BC Provincial Parks (PP) and Pacific Rim National Park Reserve (PRNPR)
- Discussions with businesses about the WildSafeBC Business Pledge Program
- Promoting of the pilot regional fruit gleaning program
- Utilizing social media, papers, blogs, podcast, TV, Zoom and radio to further education reach
- Education on the importance of using the Report All Poachers and Polluters Line 24/7 to report bear, wolf and cougar activity in communities
- Promoting the Bare Campsite Program (BCP) including training and on-going support for local campground operators
- Delivering of wildlife awareness and safety and bear spray training sessions
- Working with local Bylaw Services to develop bylaws and other tools for human-wildlife conflict prevention
- Participating in the Iisaak Sin Hay Tiic?mis Co-existence Network
- Participating in the ACRD West Coast Waste Management Advisory Group
- Working with local businesses and School District 70 to source certified bear-resistant garbage/recycling bins - 11 bins enroute to the West Coast
- Working with many homeowners and vacation rental operators to source residential sized, certified bear-resistant bins
- Working with SonBird Waste Management and Ozzard Waste Management to encourage greater implementation of self-latching commercial bins. Both have added these bins to add to their inventory. The first 2 self-latching bins were installed in a conflict hotspot area and there are 15 more bins being deployed
- Working with residents, businesses and Toquaht FN on electric fencing initiatives with 11 electric fences installed, and 12 parties have expressed interest for 2022,
- Indigenous engagement with the Nuu-chah-nulth Warriors program including field trips, wildlife awareness and bear spray training sessions
- Indigenous engagement with 130 door-to-door education packages for Esowista
- Coordination and collaborations with the WildSafeBC Hitacu-Macoah Program

The 2021 season was made possible thanks to generous financial support from the BC Conservation Foundation, the Alberni-Clayoquot Regional District, the Province of BC, the District of Ucluelet, the District of Tofino, Ocean Outfitters, Hotel Zed, the Clayoquot Biosphere Trust, and the Nuu-chah-nulth Warriors Program. Pacific Rim National Park Reserve provided in-kind support.

Some key challenges highlighted in the 2021 season were:

- Lack of a Wildlife Attractant Management Bylaw
- Unsecured commercial garbage bins
- Businesses using non-wildlife resistant commercial garbage bins
- Residential garbage stored in backyards, car ports or in wooden, plastic or metal structures

- Chicken coops without electric fencing
- Improper composting practices and non-bear-resistant structures
- Outdoor freezers and fridges and
- Intentional feeding of wildlife

Moving forward, there are initiatives and collaborations underway to address these and other challenges to help "keep wildlife wild and our communities safe".

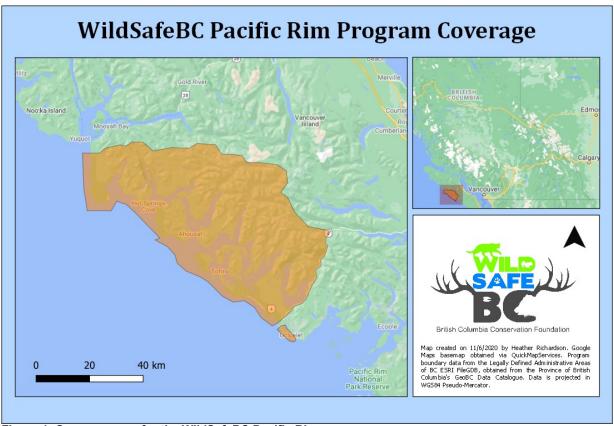


Figure 1. Coverage area for the WildSafeBC Pacific Rim program.

Table of Contents

Executive Summary	1
Highlights from the 2021 Season	6
Wildlife Activity	6
Other Possible Factors Contributing to Bear Activity	. 10
Realities and Consequences of Human-Bear Conflicts	. 11
WildSafe Ranger Program	. 13
Presentations to Community Groups	. 13
Display Booths	. 14
Door-to-Door Education and Bin Tagging	. 15
Social Media, the Press and Other Medias	. 16
Wildlife in Area Signs / Infographics	. 17
Partners and Collaborations	. 18
WildSafe Business Pledge	. 19
WildSafeBC Bare Campsite Program	. 20
Indigenous Awareness and Engagement	. 20
Special Initiatives	. 22
Challenges and Opportunities	. 25
Acknowledgements	. 26
Appendix I	. 27
List of Figures	
Figure 1. Coverage area for the WildSafeBC Pacific Rim program	3
Figure 2. Reports to the COS and WARP by species from January 1, 2016, to November 30 2021),
Table 1. 2021 Wildlife reports to the COS and WARP in comparison to 2020 and 2016-2020 five-year average.)
Figure 3. Reports to the COS and WARP regarding black bear by month from January 1, 20 to November 30, 2021.	016
Figure 4. Black bear reports to COS and WARP in Pacific Rim region by attractant from January 1, 2016, to September 30, 2021	
Figure 5. Map of incidents 11 involving chickens in Tofino.	8

Figure 6. One coop broken into on two occasions resulting in loss of entire flock of five	9
Figure 7. Examples of 42 garbage and/or recycling storage structures breached by bears	9
Figure 8. Commercial bins left unsecured and overfilled.	11
Figure 9. Bear-resistant poly cart bins left unlatched and not securely anchored	11
Figure 10. Residential metal garbage/recycling storage bin installed after shed broken into	
twice	12
Table 2. Classes that received the WildSafe Ranger Program in 2021	13
Table 3. Presentations provided by the WCC in 2021	13
Figure 11. Day one of the BCGW weekend at Amphitrite Point on the Wild Pacific Trail	14
Figure 12. Day two of the BC Goes Wild weekend in the centre of Tofino on a blustery day.	. 15
Table 4. Bin tag surveys in 2021	15
Table 5. Esowista and Ucluelet door-to-door canvassing in 2021	15
Table 6. Tofino door-to-door canvassing in 2021	16
Table 7. Media employed to increase educational reach in 2021	16
Figure 13. WildSafeBC bear-in-area caution sign posted immediately following a bear at	
school	17
Figure 14. Welcome to Wildlife Country infographic for accommodation providers and other	rs18
Table 8. Partners and Collaborations – issues and initiatives	18
Table 9. Bare Campsite Program update.	20
Figure 15. Nuu-chah-nulth Warrior youth and Elders – 3 day Effingham Inlet field trip	21
Figure 16. Warrior cabin project at Okeamin in Clayoquot Sound	21
Figure 17. Electric fencing subsidy for residents of WildSafeBC Pacific Rim and Hitacu-	
Macoah program areas	
Table 11. The diversity of electric fencing installations completed with support of subsidy	23
Figure 18. Growing interest in electric fencing to protect chickens, composters and other	
applications	
Figure 19. The pilot fruit gleaning program launched in 2021	
Figure 20. Tofino Co-op Hardware Manager with new bin (left) and Canadian Princess Res	
replaced old bins (on the right) with new Hid-a-bag bins.	
Figure 21 Rears illustrated which forms of storage were not bear-resistant	27

Cover Photo: Electric Fencing Workshop co-hosted by WildSafeBC Pacific Rim and the Tofino Community Food Initiative.

Highlights from the 2021 Season

Wildlife Activity

Reports made to the Conservation Officer Service (COS) through the RAPP line (1-877-952-7277) and online form (https://forms.gov.bc.ca/environment/rapp/) are available to the public through WildSafeBC Wildlife Alert Reporting Program (WARP) on WildSafeBC's website. This data is updated daily and this report for the Pacific Rim Region includes data from January 1, 2016, to November 30, 2021 (Figure 2).

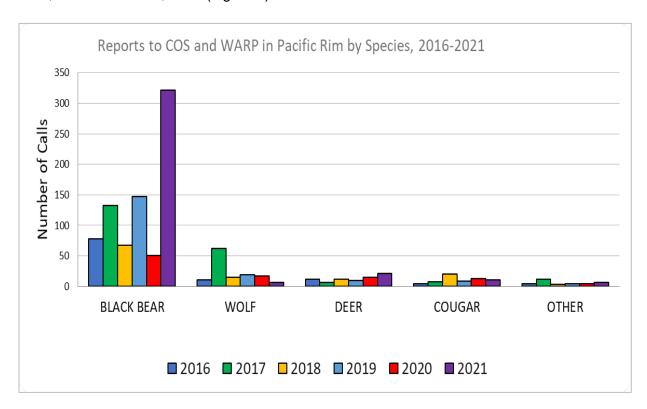


Figure 2. Reports to the COS and WARP by species from January 1, 2016, to November 30, 2021.

In 2021, black bear reports were significantly higher than the five-year average from January 1, 2016, to November 30, 2021. Cougar reports were close to the five-year average. Wolf reports were lower than in 2020 and compared to the five-year average (Table 1).

Table 1. 2021 Wildlife reports to the COS and WARP in comparison to 2020 and 2016-2020 five-year average.

Species	2021	2020	2016 to 2020 Average
Black bear	325	44	93
Cougar	12	12	11
Wolf	4	14	24

There were two confirmed reports of a wolf accessing improperly stored food bags from campers on Vargas Island. There were several close encounters with a wolf or wolves exhibiting habituated behaviour. The Provincial Park Ranger Service, PRNPR wolf expert and the WCC collaborated to develop a response focussed on education initiatives. Provincial Parks also secured funds to purchase and install additional food caches for several popular camping beaches.

The role of the photography and filming in the habituation Vargas wolves to humans is a concern. Planning was initiated for a gathering of the Ahousaht First Nation, Provincial Parks, island residents, business operators, WildSafeBC and others to develop a strategy for coexisting with the Vargas wolves. An lisaak Sin Hay Tiic?mis Co-existence Network working group was formed to focus on understanding the impacts of interactions between wildlife and filmmakers/photographers.

Black bear activity was reported throughout the season, starting in March, both within and near each community. In 2021, 13 food-conditioned bears were destroyed versus 2 bears in 2020. Black bear reports moved up in June and peaked in July. Report numbers dropped slightly in August but were still high relative to previous years. Reports increased again through September and October (Figure 3). The number of November reports were the highest recorded for that month since 2016. Unlike in 2020 when 10 bears died in collisions with vehicles there were no such reports in 2021.

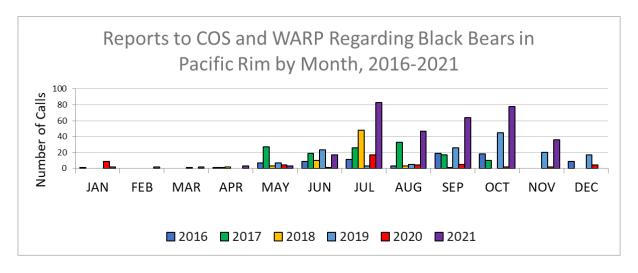


Figure 3. Reports to the COS and WARP regarding black bear by month from January 1, 2016 to November 30, 2021.

Overall, there was an increase in the numbers of human-bear conflict reports to the COS. They were associated with a wide variety of attractants (Figure 4). Of note was the increase in the representation of most attractant categories over previous years. Unsecured garbage was the most significant attractant issue. Many incidents involved unsecured commercial bins, overflowing bins, garbage stored in sheds or other enclosures in backyards and non-bear-resistant bins like plastic barrels on the premises of businesses. Recycling stored in non-bear-

resistant structures was another significant attractant.

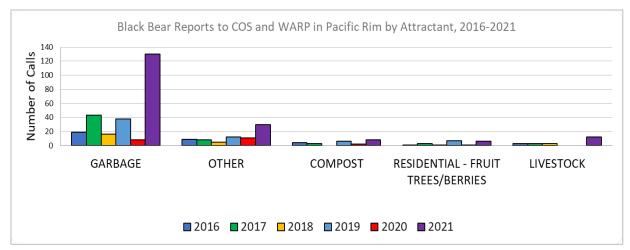


Figure 4. Black bear reports to COS and WARP in Pacific Rim region by attractant from January 1, 2016, to September 30, 2021.

In 2019 and 2020 there were no livestock-related reports. In 2021, there were 11 reports involving chickens in Tofino and one in Ucluelet (Figure 5). Some coops were hit by a bear(s) more than once (Figure 6).



Figure 5. Map of incidents 11 involving chickens in Tofino.



Figure 6. One coop broken into on two occasions resulting in loss of entire flock of five.

Structural damage reports increased in the fall. All structures contained garbage and/or recycling or compost or in one case grease. Structures included wooden boxes enclosing garbage cans to sheds. Wooden, plastic and metal sheds were accessed. In all, 42 structures were breached.



Figure 7. Examples of 42 garbage and/or recycling storage structures breached by bears.

The COS was able to provide some insights into the numbers for the 'Other' category. These reports related mostly to bears accessing outdoor freezers and breaking into sheds and other structures. There were 4 reports of outdoor freezers and 1 outdoor fridge being accessed. Bears damaged 4 barbeques. One resident had an outdoor bean bag couch destroyed by a bear.

There were 3 incidents where a bear entered a dwelling. In each case people were present and were able to direct the bear to an exit. On 3 occasions a bear tried to enter dwellings but in each instance was chased off.

There were 2 trucks were broken into, and a bear went through the wall of a motorhome that had garbage stored inside. See in Figure 24 in Appendix 1, a photo collage showing examples of property damage.

Other Possible Factors Contributing to Bear Activity

In the early spring of 2021 natural foods were plentiful including grasses, sedges, horsetail, and skunk cabbage. Many species of berry bushes had abundant flowers boding well for the various berry crops later in the season. A rare weather event classified as a "heat dome" affected the west coast from late June until mid-July. Daily maximum temperatures ranged from 10 to 15+ degrees Celsius above the average for those dates. During the same period there was very little precipitation.

This weather phenomenon appeared to negatively affect the berry crop production in the region. The WCC observed personally and received reports of sparse berry production particularly inland from the coast.

In contrast there was an observed abundance of berries in a narrow band right next to the coast in what is referred to as the "fog zone". This area experiences, in the height of summer, frequent fog banks that extend a few hundred meters in from the shoreline. The fog results in cooler temperatures and higher humidity within the narrow coastline band. Most local communities are encompassed by the "fog zone".

A noticeable increase and peak in human-black bear conflict numbers coincided with the period of the "heat dome". At the same time an abundance of berries in communities within the "fog zone" may have drawn bears into those communities. Bears found berries but also access to a full range of unnatural attractants.

Another likely factor involved in increased human-bear conflicts was the easing of COVID-19 travel restrictions in mid-June. Visitation to the region quickly increased and the Tofino tourism agency accommodation statistics showed over 90% occupancy reached shortly after the easing. The high visitation resulted in the overwhelming of local waste management and recycling infrastructure (Figure 8). Commercial bins were commonly misused by being left unsecured. There were observations of both tourists and residents disposing of garbage into bins meant for business use only. Garbage was left on top of or on the ground beside bins.



Figure 8. Commercial bins left unsecured and overfilled.

Bears found another source of unsecured garbage stored in back yards of residents. This also occurred at some vacation rental properties and staff houses that generated large volumes of garbage and recycling but did not have bear-resistant storage. In some instances, bear-resistant poly carts were used to store garbage but were not latched and were not securely anchored to prevent a bear dragging them off (Figure 9).



Figure 9. Bear-resistant poly cart bins left unlatched and not securely anchored.

In years past, conflict numbers in the region often lessened around the time of the runs of returning salmon in local rivers around late September and early October. The staff of the Tofino Salmon Enhancement Society and the Thornton Creek Enhancement Society reported widespread low chum salmon returns for 2021. Staff from the societies monitor salmon returns on many of the streams from Barkley Sound to Clayoquot Sound. Reduced availability of spawning salmon may be another contributing factor to high conflict numbers. Salmon are a key food source at a time when bears are experiencing hyperphagia.

Realities and Consequences of Human-Bear Conflicts

By the early fall 8 food-conditioned bears had been captured and destroyed by the COS. As the fall progressed conflict numbers continued to be high as removed bears were replaced by other bears that in turn became food-conditioned. One bear captured by the COS, was assessed as not being the food-conditioned bear they were trying to remove. The bear was translocated 80 kilometers into the mountains towards Port Alberni. The bear was spotted back

in the community after 10 days. It subsequently did become food-conditioned and was documented trying to access garbage at a residence.

Conflict numbers increased steadily through September to the end of October. Conflicts lessened in November, but report numbers were much higher than in any previous November going back to 2016. The incidents in the fall often involved property damage. Many garbage and/or recycling sheds or similar storage structures were broken into. A pattern emerged in response to these incidents. People had damaged sheds repaired and fortified only to have bear return and damage the structure again. The bears clearly illustrated their strength and ability to break into structures. Several people repaired or rebuilt their structures 2, 3 or even more times.

The WCC consulted with many people who came to realize they needed to try a different approach. The WCC was able to direct individuals, strata councils, staff house owners and vacation rental property managers to Interagency Grizzly Bear Committee or WildSafeBC certified bear-resistant metal container options for storing garbage/recycling (Figure 10). The WCC received feedback that over 15 residential certified bear-resistant metal storage containers such as the TyeDee bin or the TuffBoxx had been ordered and installed.



Figure 10. Residential metal garbage/recycling storage bin installed after shed broken into twice.

By the end of November, when adding up all the incidents involving property damage including, chicken coops, composters, sheds, garbage boxes, barbeques, freezers/fridges, vehicles, an RV and other types of damage, the total was over 60. The extent of damage undoubtedly represented thousands of dollars of damage. Aggressive bear behaviour was reported in many close encounter incidents. There were 3 incidents where a bear bluff charged a person. On 2 occasions people deployed bear spray to deter a bear. By the end of November, the toll on bears had risen to 13 food-conditioned bears destroyed. The WCC engaged in a variety of conflict prevention and reduction activities during the program season as described in the following sections.

WildSafe Ranger Program

The WildSafe Ranger Program (WRP) introduces youth to the concept of human-wildlife conflict and prevention measures. Wildlife awareness and safety is covered including what to do in close encounters. The Wickaninnish Community School, the Ucluelet Elementary School and the Tofino Heartwood School participated in the WRP through hosting classroom presentations. Teachers ensured students followed COVID-19 safety protocols as prescribed by School District 70. The total number of youth and teachers that received WildSafe Rangers sessions and received education kits was 195 (Table 2).

Table 2. Classes that received the WildSafe Ranger Program in 2021.

School	Grade	Students
Wickaninnish Community School	K – Grade 7	174
Ucluelet Elementary School	Grades 6-7	11
Tofino Heartwood School	K – Grade 3	10

Presentations to Community Groups

The WCC gave a total of 12 presentations through webinars and outdoor presentations to over 130 participants (Table 3).

Table 3. Presentations provided by the WCC in 2021.

Species	Date	# of Participants	Topic
Wya Campground	May 18 th , 2021	5	Bare Campsite Program
Manager&Staff			
	May 19, 2021	13	Wildlife Safety and Awareness
Ocean Outfitters			(WS&A)
Managers/Staff of 3	May 31, 2021	10	Bare Campsite Program
Campgrounds			
Clayoquot Biosphere Trust	May 26, 2021	25	WS&A
Majestic Kayaking	June 1, 2021	6	WS&A and Bear Spray
NCFN Warriors	June 5, 2021	16	WS&A
NCFN Warriors	June 5, 2021	10	Bear Spray
Wickaninnish Inn	July 28th, 2021	4	WS&A
Electric Fencing Workshop	Aug. 11-12th, 2021	10	Electric Fencing 101
Wickaninnish Inn	Aug. 30th, 2021	4	WS&A
Electric Fencing and	Sep. 17 th , 2021	9	Electric Fencing to Protect
Chickens			Chickens
lisaak-Sin-Hay_Tiic?mis	Oct. 14 th , 2021	18	Season overview – Bylaws
Co-existence Network			initiative

Display Booths

Due to COVID-19 safety concerns, the only booth days occurred in late September for BC Goes Wild. BC Goes Wild is a campaign to celebrate wildlife in BC and it occurs in September which is typically the month when human-bear conflicts are at their highest.

The weekend of September 25-26th, the WCC co-hosted booth days in collaboration with the Hitacu-Macoah coordinator, PRNPR Interpretation Service, the Wetland Stewards of Barkley and Clayoquot Sound and the Districts of Ucluelet and Tofino.

A BC Goes Wild Photo Contest was also launched. To participate, people submitted pictures or video of themselves acting to "help keep wildlife wild and communities safe". There were five local businesses that generously provided prizes. Names were drawn from a hat after the end date of October 3rd. The combined events resulted in over 300 people being engaged.

The weather on the first booth day Saturday, September 25th, 2021, was favorable. The booth was situated at the Amphitrite Point trailhead for the Wild Pacific Trail. The sunny weather and spectacular setting on a popular trail ensured a good turnout. Over 150 people stopped to spend time with the booth team to learn more about appreciating and co-existing with wildlife (Figure 11).

The booth team for day one was:

- Barb Beasley, PhD Founder and Director of Wetland Stewards of Barkley and Clayoquot Sound
- Janel Saydam, PRNPR Interpreter
- Ian Cruickshank, PRNPR Ecologist and expert birder
- Marianne Paquette, Hitacu-Macoah WCC
- Bob Hansen, Pacific Rim WCC



Figure 11. Day one of the BCGW weekend at Amphitrite Point on the Wild Pacific Trail.

The location of the booth for day two was in the centre of Tofino beside the Village Office. The weather was challenging with steady rain and strong wind gusts. Despite the conditions over 50 people stopped by (Figure 12). The team for day two consisted of Janel, Marianne and Bob.



Figure 12. Day two of the BC Goes Wild weekend in the centre of Tofino on a blustery day.

Door-to-Door Education and Bin Tagging

Garbage bin tagging consists of placing a highly visible and removable warning sticker on top of containers set curbside the day before collection. There were 3 surveys in 2021 (Table 4). Due to the low number of bins left out, the WCC shifted focus to door-to-door education.

Table 4. Bin tag surveys in 2021.

Bin Tag Survey	Date	# of Bins Tagged
Tofino-1	May 5, 2021	6
Tofino-2	June 30, 2021	2
Ucluelet-1	July 19, 2021	0

Door-to-door education was modified this year to consist of leaving door hangers with prevention education information attached. As a result of COVID-19 concerns, the WCC did not knock on doors as have been done in the past. Through door-to-door education, over 400 people were reached with door hanger education packages (Tables 5 and 6).

Table 5. Esowista and Ucluelet door-to-door canvassing in 2021.

Door-to-Door Canvasses	Neighborhood	# of Residences
Esowista	Entire community	130
Ucluelet	Rainforest Drive/Boulevard	75
	St. Jacques Boulevard	35
	Holly Crescent	40
	Otter/Pine Streets	40
	Elina Road	10

Table 6. Tofino door-to-door canvassing in 2021.

Door-to-Door Canvasses	Neighborhood	# of Residences
Tofino	Ocean Park	80
	Beaches	5
	Howard Drive	35

Social Media, the Press and Other Medias

The WCC made 38 posts on the WildSafeBC Pacific Rim Facebook page. Page followers increased by 239 from 891 to 1130. Various forms of media were utilized to extend the educational reach of the program (Table 7).

Table 7. Media employed to increase educational reach in 2021.

Type (radio, news article, phone, email, tv)	Media Outlet Name	Date	Title/ topic
	Westerly		Season Start for WildSafeBC Pacific Rim and
News article	News	May 12, 2021	Hitacu-Macoah
	Westerly		
News article	News	July 6th, 2021	Bears in local campgrounds and communities
	Tuff City		Fruit Gleaning/preventing
Radio Interview	Radio	July 27th, 2021	conflict/encounters/safety
	Westerly		Increasing conflict and ways to prevent
News article	News	Aug 9th, 2021	escalation
	West Coast		
Blog Post - CBT	N.E.S.T.	Aug 13th, 2021	Preventing human-wildlife conflict
	Science 360		Understanding habituation. Safety in wildlife
Podcast Interview	Series	Aug 30th, 2021	encounters. WildSafeBC resources and WARP.
	Westerly	Sept 26th,	Two more bears killed in Ucluelet as residents
News Article	News	2021	urged to secure attractants
	Times	Sept 27th,	Two more bears killed in Ucluelet as residents
News Article	Colonist	2021	urged to secure attractants
		Sept 28th,	Ten black bears put down in Tofino-Ucluelet
TV Interview	CHEK News	2021	region had lost fear of humans
		Sept 29th,	Ten black bears put down in Tofino-Ucluelet
Radio Interview	CFAX Radio	2021	region had lost fear of humans
	Tuff City		Breaking human-bear conflict – the way
Radio Interview	Radio	Oct 25th, 2021	ahead

News Article	Global News	Oct 28th, 2021	Breaking human-bear conflict – the way ahead
TV Interview	Global News	Oct 28th, 2021	Breaking human-bear conflict – the way ahead
News Article	Times Colonist	Oct 28th, 2021	Breaking human-bear conflict – the way ahead
News Article	UBC Journalism Student	Nov 29, 2021	Master of Journalism Assignment. Not yet published. Co-existing with carnivores.
News Article	Westerly News	Dec 1, 2021	Tofino and Ucluelet working on a new wildlife attractant bylaw

Wildlife in Area Signs / Infographics

The WCC worked in coordination with District of Tofino and District of Ucluelet Bylaw Service, School District 70 and local campground operators to alert people to current wildlife activity (Figure 13). The signs have information on staying safe and preventing conflict. Each sign also has the RAPP number to call to report community wildlife activity.



Figure 13. WildSafeBC bear-in-area caution sign posted immediately following a bear at school.

A new poster has been created to reach guests staying in overnight accommodations. The goal is to connect this large target audience with information on how they can help keep wildlife wild and themselves, their pets and the community safe during their visit. The infographic is suitable for inclusion in accommodation information packages during registration, in rooms or for posting by businesses on their premises. The infographic is also suitable for posting in staff houses and sharing with strata residents. This initiative arose from a collaboration of the Hitacu-Macoah WCC with a local business owner, Kristen O'Keefe - The Den Refillery and with support from BCCF staff. The business works with many local accommodation providers. They will assist in getting this new educational resource into the hands of accommodation providers and their guests (Figure 14).



Figure 14. Welcome to Wildlife Country infographic for accommodation providers and others

Partners and Collaborations

WildSafeBC is grateful for the support of its funding partners and the many organizations that collaborate with the program to address human-wildlife conflicts in the region (Table 8).

Table 8. Partners and Collaborations – issues and initiatives.

Partners/Collaborations	Issues / Initiatives
Clayoquot Biosphere	Funder. Tofino Mudflats Wildlife Management Area, Tofino Official
Reserve - Partner	Community Plan, supporter of regional fruit gleaning initiative.
District of Ucluelet - Partner	Funder. Waste management operations, infrastructure and
	strategy,Bear Smart Community Program, Bylaws development,
	Official CommunityPlanning.
District of Tofino –	Funder. Waste management operations, infrastructure and
Partner	strategy, Bear Smart Community Program, Bylaws development,
	Official Community Planning.
Alberni-ClayoquotRegional	Funder. Waste management operations, infrastructure and
District (ACRD) - Partner	strategy for west coast communities, and First Nations. ACRD
	Communities Subsidy for electric fencing for the prevention of
	human-wildlife conflicts, Coastal Food Policy development.
Ocean Outfitters –	Funder. Prevention of dog-wildlife conflicts, training for eco-tourism
Partner	guides, supporter of regional fruit gleaning program. Prevention of
	wildlife habituation due to inappropriate wildlife photography and

	film making practices
	film-making practices.
Pacific Rim NationalPark	In-kind sponsor. Wildlife research, monitoring information sharing.
Reserve - Partner	In-kind WildSafeBC operations support. Wild about Wolves
	research project. Prevention of wildlife habituation due to
	inappropriate wildlife photography and film-making practices.
Hotel Zed –	Funder. Promotion of human-wildlife safety and coexistence.
Partner	Development of dog-owner education and for hotel guests.
Wickaninnish Inn –	Promotion of human-wildlife safety and coexistence. Training for
Collaboration	staff. Engaged in WildSafeBC Business Pledge process.
lisaak Sin Hay Tiic?mis -	18 members representing First Nations, all levels of government,
RegionalCoexistence	Tourism agencies, business organizations, NGOs and others.
Network –	
Collaboration	
Ucluelet and Tofino	Deliver wildlife co-existence education and safety for Ambassadors
Chambers of Commerce -	Training Program for tourism frontline staff. Input on content from
Collaboration	WCC.
Conservation Officer	Information sharing to remain current on wildlife activity, human-
Service - Collaboration	wildlife conflict situations and to develop and implement action
	plans.
Both District BylawServices	Information sharing to remain current on wildlife activity, human-
-	wildlife conflict situations and to develop and implement action
Collaboration	plans. Collaborating on development of a wildlife attractant
	management bylaw and other tools to effect improvements in
DOD : : ID I	wildlife attractants management.
BC Provincial Parks	Promotion of human-wolf conflict prevention program on Vargas
Service –	Island and backcountry Bare Campsite Program. Prevention of
Collaboration	wildlife habituation due to inappropriate wildlife photography and
Tafina Camana wity Food	film-making practices.
Tofino Community Food Initiative –	Promotion of prevention of human-wildlife conflicts as a core
Collaboration	principle of sustainable food production. Co-host electric fencing workshops.
Collabolation	workshops.
Regional Fruit Gleaning	Promotion of prevention of human-wildlife conflicts as a core
Organization –	principle of sustainable food production.
Collaboration	

WildSafe Business Pledge

The WildSafe Business Pledge Program has been developed to recognize and support businesses that are good examples on how to safely co-exist with wildlife. To take the pledge, a business is required to follow best practices in solid waste management, provide appropriate wildlife awareness and safety training to staff and disseminate WildSafeBC's safety and conflict prevention information.

In return, WildSafeBC will provide ongoing support to the business in the form of staff training, WildSafeBC materials (subject to budget constraints) and a WildSafeBC Business Pledge poster. A total of nine businesses, four in Tofino and five in Ucluelet, have engaged in the initial phase of the process to take the Pledge. Ocean Outfitters is the first business to meet all the criteria for the WildSafeBC Business Pledge.

WildSafeBC Bare Campsite Program

Through the WildSafeBC Bare Campsite Program (BCP), WildSafeBC provides clear guidelines and resources to assist campground operators in maintaining a safe campsite for both people and wildlife. A one-day Bare Campsite Program training workshop was delivered in the spring of 2021 by the Hitacu-Macoah WCC and the Pacific Rim WCC. The Ucluelet Campground co-hosted the workshop and shared their experiences since fully implementing the BCP. A total of 11 campgrounds were invited and 4 participated by sending supervisors and staff.

Campgrounds that have fully implemented the program have met all the criteria for training, bear-resistant infrastructure and utilization of WildSafeBC BCP educational resources such as brochures, posters and signs. Some campgrounds have a modified BCP. They may utilize the WildSafeBC educational resources and/or are working on upgrading infrastructure or have yet to participate in training (Table 9).

Table 9. Bare Campsite Program update.

Campgrounds	Status	Have taken BCP training
Ucluelet	fully implemented	√
Campground		
Wya Campground	fully implemented	$\overline{\mathbf{V}}$
Mussel Beach	modified	√
Campground		_
Long Beach Golf	modified	$\overline{\checkmark}$
Course &		_
Campground		
Surf Junction	modified	
Secret Beach	modified	
Surf Grove	modified	
Provincial Parks	modified	

Indigenous Awareness and Engagement

WildSafeBC has been supporting the Warrior program since 2019. The Pacific Rim WCC was invited and honoured to participate for a second year in a multiday field trip with Nuu-chahnulth Warrior youth and Elders (Figure 15). WildSafeBC is a proud supporter of the Warrior youth leadership program. Please see this short video to hear the impact of this program model from the voice of its participants: https://vimeo.com/285752620

Youth from many Nuu-chah-nulth Nations participated in wildlife tracking, wildlife safety and awareness and bear spray training during the 2021 camp out in Effingham Inlet, Barkley Sound. The WCC shared knowledge on wildlife habitats and ecology in Barkley Sound.



Figure 15. Nuu-chah-nulth Warrior youth and Elders – 3 day Effingham Inlet field trip.

Later in the summer, the WCC and WildSafeBC Program Manager visited a Warrior cabin project at the Okeamin Reserve in Clayoquot Sound (Figure 16). Many signs of bear activity were observed including fresh scat and rub trees.



Figure 16. Warrior cabin project at Okeamin in Clayoquot Sound.

The WCC discussed with the project leaders' and youth options on infrastructure, attractant management, and other ways to prevent human-bear conflicts at the site. WildSafeBC looks forward to supporting the program model as it continues to grow roots in more communities across British Columbia.

In another collaboration, the WCC responded to requests for educational information following human-bear conflicts in the Tla-o-qui-aht village of Esowista. Pacific Rim National Park Reserve (PRNPR) provided printing support and helped assemble door hanger information packages for 130 residences. The PRNPR First Nation Liaison Officer, a Ty-his-tanis resident, hand delivered the packages to each household. The communities of Esowista / Ty-his-tanis were closed to the public due to a COVID-19 safety closure.

The WCC has been involved with the Indigenous-led West Coast Stewardship Corridor initiative along with three local First Nations and the Clayoquot Biosphere Trust. A central theme is understanding wildlife habitat quality and availability as a dynamic influencing local human-wildlife conflict. The initiative has progressed from concept to the hiring of a full-time coordinator position for 2022.

Special Initiatives

Electric Fencing

The ACRD once gain provided subsidy funding for electric fencing for the prevention / resolution of human-wildlife conflicts (Figure 17). There is recognition that electric fencing is an effective option for protecting chickens, composters and other applications. Participation in electric fencing cost-share programs has grown with 6 fences installed in 2019, 9 in 2020, and 11 in 2021 for a total of 26.



Figure 17. Electric fencing subsidy for residents of WildSafeBC Pacific Rim and Hitacu-Macoah program areas

In 2021 there were also discussions and site visits with another 12 residents to assess best electric fencing options for their situation. These residents have yet to decide on proceeding and are listed as pending. There has been a diverse range of electric fencing applications (Table 11) (Figure 18).

Table 11. The diversity	of electric fencin	a inetallatione	completed with	n support of subsidy
Table 11. The diversity	/ OI electric rencin	u mstanations	Combieted with	I SUDDOIL OF SUDSIGN.

Electric Fencing Application	2019	2020	2021	Pending - 2022	Total (Pending)
Chickens	5	2	4	(8)	11(8)
Livestock		2			2
Gardens		1	1		2
Greenhouses			1		1
Compost	1		1	(1)	2 (1)
Garbage Shed		1			1
Recycling Shed			2	(1)	2 (1)
Garbage/Recycling			1	(1)	1(1)
Shed					
Foodcache Sheds		2			2
Smoker				(1)	(1)
Fruit Trees		1	1		2



Figure 18. Growing interest in electric fencing to protect chickens, composters and other applications.

Fruit Gleaning

In 2021, a pilot fruit gleaning service was initiated for Tofino and Ucluelet with funding support from Ocean Outfitters and the Clayoquot Biosphere Trust. The program administered by BCCF and is run by the Tofino Community Food Initiative with a team of volunteers led by a paid coordinator. The program's goal is to support residents in better fruit tree stewardship and

preventing bears from accessing these high calorie food rewards that lead to food conditioning.

The goal was to pick fruit before a conflict with bears arose. One third of the fruit went to the resident, one third to the local food bank or other organization and one third to the volunteers. The first tree tackled by the team was very large and already had been fed on by more than one bear. The team was ready for big and small jobs (Figure 19). The large tree yielded 100 kilograms of plums and the small tree 20 kilograms of apples.



Figure 19. The pilot fruit gleaning program launched in 2021.

Bear-Resistant Infrastructure

The WCC provided information to 3 businesses interested in sourcing certified bear-resistant bins to replace non-bear resistant garbage cans on their premises. Ucluelet and Tofino Co-op stores purchased 2 Haul-All Hid-a-bag bins each and Canadian Princess Resort purchased 7 Hid-a-bag bins for their resort (Figure 20).





Figure 20. Tofino Co-op Hardware Manager with new bin (left) and Canadian Princess Resort replaced old bins (on the right) with new Hid-a-bag bins.

Challenges and Opportunities

Garbage / recycling (e.g., commercial bins, residential garbage stored outside in containers, sheds, carports) and chickens have been the major types of attractants in the community to draw wildlife into residential and business areas.

Bears have been reported damaging 42 sheds and/or other structures containing garbage and/or recycling. There have been many reports of bear accessing garbage in unsecured commercial bins. Bears have been finding other unnatural food sources including:

- Compost
- Recycling
- Barbeques / grease
- Pet / livestock food

- Freezers / coolers / fridge
- Grease
- Fruit trees
- Birdfeeders

Bears have been reported as not responding to efforts to deter them, remaining in people's yards and at times reacting aggressively in close encounters. These behaviours suggest a high degree of food-conditioning which impacts the safety of people and property. To address the abundance and availability of unnatural wildlife attractants in the community, the following actions should be implemented in 2022:

- Make delegations to Tofino and Ucluelet Mayors and Councils on steps to break the cycle of human-bear conflicts including:
 - o adopting a wildlife attractant management bylaw,
 - o passing a formal resolution to pursue Bear Smart Status,
 - and to continue financial and in-kind support for the WildSafeBC Pacific Rim Program
- Support development of portals to comprehensive wildlife-conflict prevention and coexistence information on the websites for the Districts of Ucluelet and Tofino as well as on the websites for Tourism Ucluelet and Tourism Tofino
- Electric fence workshops
- Electric fence installations supported with the expertise of the WCC and the ACRD subsidy fund
- A comprehensive education campaign focusing on the hazards and solutions through social media, news articles, workshops, infographics inserts in municipal tax notices and other opportunities to extend the program reach
- Engage volunteers to help increase frequency of door-to-door campaigns in hotspot areas
- Establish working groups in both communities to discuss and develop strategies for reducing the availability of garbage, both commercial and residential to bears and other wildlife
- Collaborate with district bylaw services and First Nations on development of comprehensive provisions around management of wildlife attractants for implementation in 2022 (e.g., bylaws, business license conditions, development permit conditions)

- Engage multiple businesses in the WildSafeBC Business Pledge Program
- Support more campground operators in the full implementation of the Bare Campsite Program
- Continue offering Wildlife Awareness and Safety / Bear Spray training courses
- Promote WildSafeBC E-Learning courses
- Maintain and grow working relationships in the region through participation in the lisaak-Sin-Hay-Tiic?mis Co-existence Network and other venues, and
- If the COVID-19 situation allows increase presence in the schools through the WildSafe Ranger Program.

Acknowledgements

WildSafeBC is grateful for the support and funding provided by the BC Conservation Foundation team, Ocean Outfitters – General Manager Ocean Simone Shine, Hotel Zed – General Manager Brittany Chalmers, Alberni-Clayoquot Regional District – General Manager of Community Services Jenny Brunn, District of Ucluelet - Mayor Mayco Noel and Council, District of Tofino - Mayor Dan Law and Council, Clayoquot Biosphere Trust – Executive Director Rebecca Hurwitz and Research Director Laura Loucks and Nuu-chah-nulth Warriors Program - Ricardo Manmohan.

Thank you for crucial in-kind support from Pacific Rim National Park Reserve - Arlene Armstrong, Ecologist Team Leader, Todd Windle – Wild about Wolves Research Coordinator, Francis Bruhwiler, the Human-Wildlife Co-existence Specialist and the wildlife team, Jeffrey David, First Nations Liaison Officer ?apsčiik tašii, Ucluelet Bylaw Officers Brittney Willms and Nelson Duarte, Abby Fortune, Director of Recreation and other staff of the District of Ucluelet, Bylaw Services Manager Brent Bake and Officer Brent Ashton, and staff of the District of Tofino, Michael Grandbois and Alec Patterson of the Provincial Parks Ranger Service, and Sgt. Stuart Bates, Daniel Eichstadter, Andrew Riddell and Mallory Blake of the Conservation Officer Service.

Appendix I

