# INTERAGENCY GRIZZLY BEAR COMMITTEE (IGBC)

# BEAR SMART COMMUNITY FRAMEWORK: MANUAL FOR COMMUNITIES REFERENCES

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### References

#### Other Organizations

Interagency Grizzly Bear Committee – Bear Science: There are several links on this page that provide excellent information about grizzly bears including information about their history, diet, and habitat use. There are also links to ecosystem-specific information.

Bear Science - Interagency Grizzly Bear Committee (IGBC) (igbconline.org)

#### USGS – Potential movement paths for grizzly bears

This website includes information on potential movement paths for male grizzly bear dispersal between the Northern Continental Divide and Greater Yellowstone Ecosystems from 2000 to 2015. Also included are links to shapefiles of grizzly bear distribution and dispersal paths.

Randomized shortest paths for Grizzly Bear dispersal between the GYE and NCDE - ScienceBase-Catalog

Get Bear Smart Society – Behaviour: This webpage includes information about bear behavior as it related to keeping both bears and people safe. There are additional links to further information on bear communication, diet, habitat use, and reproduction.

Bear Behaviour - Understanding black and grizzly bears - BearSmart.com

# **Human-Bear Conflicts**

*IUCN Human-Wildlife Conflict Task Force* – *Human-Wildlife Conflict & Coexistence Library*This website provides an extensive list of resources on human-wildlife conflict including peer-reviewed literature, editorials, policy and briefing documents. Documents can be searched by key topics as well as species.

**Document Library (hwctf.org)** 

People and Carnivores – Literature Reference: This document produced in 2020 provides summaries of peer-reviewed research papers related to human-wildlife conflict, carnivore conservation and management.

https://peopleandcarnivores.org/research-and-manuals

# Working Collaboratively Resources

The links below contain information that communities might find helpful as they begin the collaborative work required to become a Bear Smart Community.

*U.S. Forest Service – The Art of Collaboration:* This site includes links to information on how to start working collaboratively and practical suggestions for getting the group up and running.

Partnership Resource Center - The Art of Collaboration (usda.gov)

The MSP Guide: How to Design and Facilitate Multi-Stakeholder Partnerships: This comprehensive guide provides an in-depth look at collaborative partnerships and includes information about how to help

make them successful. It also includes numerous practical tools and tips for building successful partnerships.

(16) The MSP Guide: How to design and facilitate multi-stakeholder partnerships | Herman Brouwer - Academia.edu

*NOAA* – *Planning and Facilitating Collaborative Meetings:* This guide provides useful information on planning and facilitating effective collaborative meetings. The guide provides information on the collaborative process, as well as skills, tools, and techniques for successful facilitation of collaborative meetings.

PFCM Manual (noaa.gov)

Wildler Collaboration Factors Inventory: The link below provides a series of statements that are designed to get a group thinking about what is working well and what areas need improvement. It can be used to help assess how a collaboration is doing and identify areas where additional work might be needed.

Wilder Collaboration Factors Inventory (webnode.com)

# Case Studies: Examples of Bear Smart Communities in North America

The links below provide examples of communities with bear smart practices across North America. They are not reflective of the IGBC Bear Smart Framework element outlined in this manual. Rather, they are meant to be examples of other successful community efforts that help bears and people share the landscape.

Wildsmart – Biosphere Institute of the Bow Valley: Wildsmart is an initiative in Canmore, Alberta, Canada that encourages communities in the Bow Valley to collaboratively work together to reduce negative human-wildlife interactions.

<u>Wildsmart — Biosphere Institute of the Bow Valley</u>

Get Bear Smart Society – Successful Bear Smart Efforts: This page provides examples of communities across North America that have improved the way the live with bears. Links to additional information about each of these communities can also be found on this page.

Success Stories - BearSmart.com

*Bear Smart Durango:* This website provides information of how the community of Durango, Colorado is working to successfully live with bears.

**Bear Smart Durango** 

Mountain View BearSmart: In Alberta, Canada the Mountain View BearSmart Society was formed in November 2008. The group works to reduce conflicts between humans, bears, and other wildlife. The website details their activities and provides a variety of resources.

Mountain View BearSmart Society

WildWise Yukon – Bear Smart Communities Scan 2018: The report at the link below provides a cross-jurisdictional scan of communities that are working towards human-bear conflict reduction. It profiles several communities in Alberta, British Columbia and Alaska.

#### Bear-Smart-Communities-Scan-2018.pdf (wildwise.ca)

# Community Assessments

Ontario Ministry of Natural Resources – Bear Wise Community Hazard Assessment: The document at the link below provides an overview and example hazard assessment template for communities in Ontario, Canada that are working to become Bear Wise.

Ontario-BearWiseCommunityHazardAssessment.doc (live.com)

Bow Valley Bear Hazard Assessment: The report at the link below provides an example of a community assessment completed for the Bow Valley in Alberta, Canada.

Bow Valley Bear Hazard Assessment 2007 (alberta.ca)

Bear Hazard Assessment Smoky Region: The report at the link below provides an example of a community assessment completed by the Miistakis Institute for the Smoky Region of Alberta, Canada. Microsoft Word - SmokeyRegion BearHazard Aug 312011.docx (communityconserve.ca)

Bear Hazard Assessment and Human Bear Conflict Mitigation Plan for the Village of Salmo: The link below provides an example of a community assessment for Salmo, British Columbia, Canada. Salmo-Bear-Hazard-Assessment-and-Human-Bear-Conflict-Management-Plan.pdf

Whitehorse Bear Hazard Assessment: This report provides an example of a community hazard assessment completed for the community of Whitehorse in Yukon, Canada. 636402205489730000 (whitehorse.ca)

Crowsnest Pass Bear Hazard Assessment: This report prepared for Alberta Sustainable Resource Development provides an example of a community hazard assessment for the Municipality of the Crowsnest Pass in Alberta, Canada.

Microsoft Word - Formated Bear Hazard Assessment.doc (communityconserve.ca)

Fort McMurray Urban Service Area Hazard Assessment: This report prepared for Alberta Sustainable Resource Development provides an example of a community hazard assessment for the Fort McMurray Urban Service Area in Alberta, Canada.

map5b\_recreation.pdf (communityconserve.ca)

# Community Plans

Lions Bay – Human-Bear Conflict Management Plan: The document below provides an example of a community plan from the Village of Lions Bay in British Columbia, Canada.

2010 formatted (lionsbay.ca)

Resort Municipality of Whistler – Human-Bear Conflict Management Plan: This document provides an example of a community plan from the Resort Municipality of Whistler in British Columbia, Canada. 2016 human-bear conflict management plan.pdf (whistler.ca)

### Attractant Management

Get Bear Smart Society – Best Practices: This website provides examples of good, better, and best Bear Smart practices for a variety of common bear attractants.

Best Practices - BearSmart.com

*People and Carnivores – Tool Resource Guide:* This document provides an overview of tools and best practices for helping to reduce conflicts between people and carnivores. https://peopleandcarnivores.org/research-and-manuals

Alberta BearSmart Program Manual – This manual contains a chapter on community best practices and provides suggestions on how to deal with common attractants.

Alberta BearSmart Program Manual

#### Bear-Resistant Waste Management

*IGBC – Bear Resistant Products:* This webpage provides an overview of the IGBC bear-resistant product testing. The page includes links to their testing protocols as well as a full list of IGBC certified products. Bear Resistant Products - Interagency Grizzly Bear Committee (igbconline.org)

Get Bear Smart Society – Waste Management: This website contains information on the types of requirements needed to ensure a container is bear-resistant. There are also details on the different types of bear-resistant options for different settings (e.g., residential vs. commercial waste). The site also includes a link to video that shows a bear testing a bear-resistant container.

Waste Management - BearSmart.com

Living with Wildlife Foundation – Living with Predators Resource Guide: This document provides details on waste management options for residential areas, campgrounds, and group-use facilities.

Refuse full 2013.pdf - Google Drive

#### **Flectric Fences**

Montana Fish, Wildlife & Parks – Deterring Bears with Electrified Fencing: This guide provide details on what an electric fence can be used for and how it works. It also includes the specifics of fence components and how to properly install an electric fence to deter bears.

mfwp\_electric-fencing-guide\_march-2017.pdf (mt.gov)

Waterton Biosphere Reserve – Electric Fencing: This guide provides an overview of electric fencing, including details of fence set up to prevent bear access.

<u>Electric-Fencing-WBR-Tech-Docs-21APR2015-rdc.pdf (watertonbiosphere.com)</u>

Montana Fish, Wildlife & Parks – A Landowner's Guide to Wildlife Friendly Fences: This guide provides an overview of a variety of fence types, including different types of electric fencing.

A Landowners Guide to Wildlife Friendly Fences (1).pdf

Living with Wildlife Foundation – Living with Predators Resource Guide: This guide details the components of electric fencing and includes a variety of temporary, portable, and permanent electric fencing designs.

electric fence 2013.pdf - Google Drive

Defenders of Wildlife – Electric Fencing: This page includes a link to a video that walks individuals through the basics of electric fence set up. There is also a link for electric fence cost-share applications. Got Grizzlies? | Defenders of Wildlife

# Ranching and Agricultural Communities

Montana Department of Livestock – Livestock Loss Board: This website provides a variety of resources for livestock owners whose operations are affected by wolves, grizzly bears, or cougars. On the site are links to additional resources (e.g., Livestock Prevention Toolkit) that include details on tools livestock owners can use to help prevent or mitigate conflicts.

Livestock Loss Board (mt.gov)

Waterton Biosphere Reserve – Carnivores and Communities Program: This website provides details of a community-based, landowner-driven program in southwestern Alberta that works with landowners to try and reduce conflicts with grizzly bears, black bears, wolves and cougars. There are links to additional resources on carcass removal, electric fencing, and securing livestock feed, as well as additional information specific to rural communities.

<u>CARNIVORES AND COMMUNITIES PROGRAM - Waterton Biosphere Reserve located in the southwestern</u> corner of Alberta

Blackfoot Challenge: The Blackfoot Challenge in Montana has brought landowners, biologists, managers, and other partners together to identify strategies to minimize conflicts with wildlife. Their website includes a variety of resources for rural communities.

Blackfoot Challenge - Wildlife

#### Grain Bin Storage

Waterton Biosphere Reserve – Securing Your Grain Storage: This guide provides an overview on how to make grain storage more bear resistant, including modifications to grain bins as well as alternatives for feed storage.

SecureGrainStorage-WBR-Tech-Docs-21APR2015-rdc.pdf (watertonbiosphere.com)

#### **Education and Outreach**

Interagency Grizzly Bear Committee – Be Bear Aware: This webpage includes pertinent information on how to act when in bear country. It also includes key messaging that can be helpful when putting together education and outreach materials. The messaging here comes from North America's leading bear experts.

Be Bear Aware - Interagency Grizzly Bear Committee (IGBC) (igbconline.org)

Interagency Grizzly Bear Committee – Materials for Educators: This page includes a link to download a coloring and activity book for kids. There is also a link to the Bear Trust International science-based lesson plan on grizzly bears.

Materials for Educators - Interagency Grizzly Bear Committee (igbconline.org)

Get Bear Smart Society – Resources for Teachers and Kids: This website from British Columbia provides links to a plethora of educational tools for teachers, children and students.

Resources for Teachers and Kids - www.bearsmart.com

Get Bear Smart Society – Educational Materials, Tools, and Strategies: This website includes numerous resources and suggestions for developing education and outreach tools for a variety of audiences.

<u>Educational Materials, Tools & Strategies - BearSmart.com</u>

Staying Safe in Bear Country: This 30-minute video is an excellent education tool for anyone that recreates, works, or lives in bear habitat and was created by leading bear experts.

Safety in Bear Country | International Association for Bear Research and Management (bearbiology.org)

National Park Service – Educator Resources: This link provides several resources for educators and includes a variety of lesson plans for different age classes.

Educator Resources - Teachers (U.S. National Park Service) (nps.gov)

Montana Fish, Wildlife & Parks – Bear Identification Program: This link provides excellent information about how to tell the difference between grizzly and black bears. It also includes a link to a bear identification test, which tests an individual's ability to distinguish between grizzly bears and black bears.

Bear Identification Program | Montana FWP (mt.gov)

*USDA Forest Service – Bear Spray and Bear Education Training in 360:* This interactive video helps users learn about bear behaviors and the proper use of bear spray.

Bear Spray and Bear Education Training in 360 on Vimeo

#### **Education Trunks**

Several organizations have put together educational bear trunks. In general, these are boxes of educational items related to bears and their behavior. The contents of the kits vary but examples of their contents include bear hides, skulls, tracks, books, and games. The links below include information about where educational trunks are available. Individuals can also check with their local Forest Service office regarding educational items and trunks that might be available.

Bear Trunk - Glacier National Park (U.S. National Park Service) (nps.gov)

Montana State Library and Montana Fish Wildlife & Parks Partner to Support Early Literacy (mt.gov)

EDUCATOR RESOURCES — GWDC (givecloud.co)

EdZOOcate ZooTrunks (zoomontana.org)

### **Evaluation and Monitoring**

*IUCN Human-Wildlife Conflict Task Force – Monitoring and Evaluation:* This website contains links to several resources to help communities develop a monitoring and evaluation plan. It also includes examples of evaluations from the peer-reviewed literature.

Monitoring & evaluation (hwctf.org)

Carnivores and Communities: A Case Study of Human-Carnivore Conflict Mitigation in Southwestern Alberta: This paper provides an example of an evaluation completed by a non-profit organization working to mitigate conflicts with carnivores. The supplemental data also provide an example of a social survey used to help evaluate their conflict mitigation efforts.

<u>Frontiers | Carnivores and Communities: A Case Study of Human-Carnivore Conflict Mitigation in Southwestern Alberta | Ecology and Evolution (frontiersin.org)</u>

# Enforcement

Get Bear Smart Society – Wildlife Attractant Bylaw Toolkit: This document provides an example bylaw and suggested guidelines for writing a bylaw. It includes suggestions for language and definitions.

GUIDE TO: GET BEAR SMART WILDLIFE ATTRACTANT SAMPLE BYLAW

Get Bear Smart Society – Community Planning Documents: This page provides suggestions for incorporating bear smart ideas into community planning documents and includes examples of community planning and decision-making documents.

Community Planning Documents - BearSmart.com

Teton County Wyoming – Land Development Regulations: This document provides standards for preventing bear conflicts. There is information about garbage and bird feeders, as well as language defining bear-resistant standards.

<u>Land-Development-Regulations-Section-522-Bear-Conflict-Area-Standards-PDF (tetoncountywy.gov)</u>

Crowsnest Pass – Wildlife Attractants: This page includes the wording of two pertinent bylaws related to garbage storage and wildlife attractants. Also included is an explanation of fines associated with breaches of these bylaws as well as a link to the full bylaws themselves.

Wildlife Attractants: News - Crowsnest Pass

*District of Squamish – Wildlife Attractant Bylaw:* This document provides an example of bylaw wording related to the storage of refuse, food sources, and other wildlife attractants. <u>194096 (civicweb.net)</u>

Bear Smart Durango – Sample HOA Bylaw: This webpage includes sample homeowners' association bylaw language regarding waste securement.

Sample HOA Bylaw | Bear Smart Durango

City of Revelstoke – Garbage Collection and Wildlife Attractants Bylaw: This page provides an example of an attractant bylaw from the city of Revelstoke in British Columbia, Canada. The page includes an overview as well as a link to the full document. September - Garbage Collection & Wildlife Attractants

Bylaw No. 2178 | Revelstoke, BC - Official Website (cityofrevelstoke.com)