

Roundtable on the Crown of the Continent

Connecting People to Sustain & Enhance Culture, Community, & Conservation

Connecting Land and Culture

9th Annual Conference
September 24 – 26, 2019
Polson, Montana
Kwataqnuq Resort on Flathead Lake

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Bozeman, Montana • October 2019

Session Notes Provided by:

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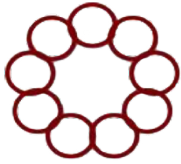
Connectivity

Session 1: Habitat Protection, Public Recreation Access, and Working Landscapes

Session 2: Roads and Wildlife

Session 3: Preserving Connections on Private Lands





Roundtable on the Crown of the Continent
Connecting People to Sustain & Enhance Culture, Community, & Conservation

2019 Conference Summary
9th Annual Roundtable Conference
September 24 – 26, Polson, MT

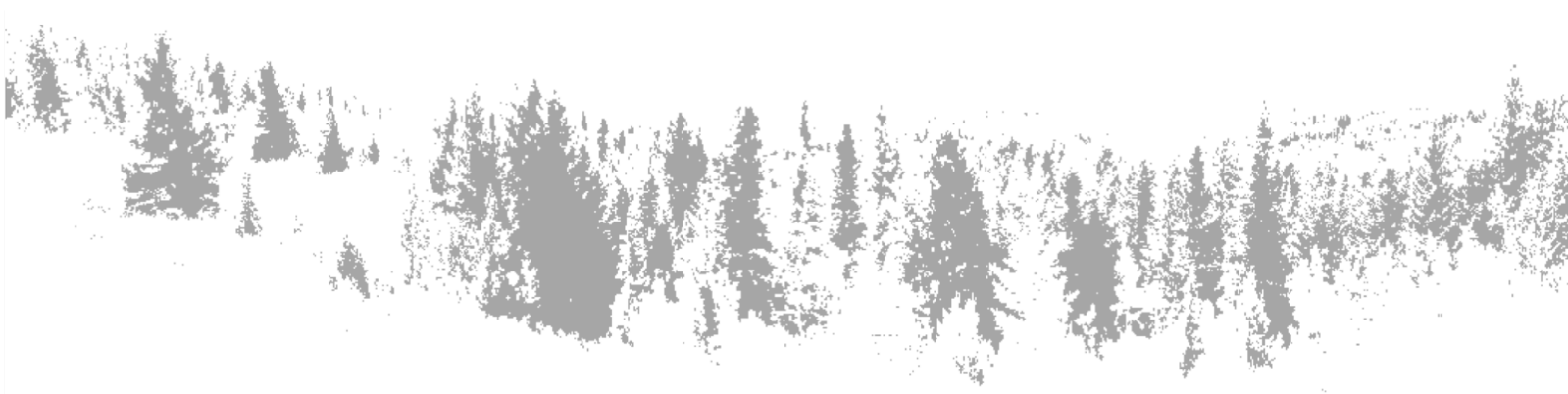
“Connecting Land and Culture”

Over 150 individuals gathered in Polson, MT at the southern edge of Flathead Lake for the 9th Annual Roundtable on the Crown of the Continent, on the theme of “Connecting Land and Culture.” Held in the heart of the Flathead Indian Reservation, natural resource managers from the Confederated Salish & Kootenai Tribes (CSKT), Blackfeet Nation of Montana and Kanai Environmental Protection Association of Alberta, and Ktunaxa Nation gathered with representatives of US and Canadian conservation groups, landowner’s associations, and county, state and federal agency representatives to share perspectives and discuss transboundary resource protection concerns from across the 18 million-acre Crown region.

Over the course of 2.5 days, the conference featured 52 speakers and engendered discussion on issues from white bark pine to native salmonids to tourism to holistic health. A common thread across presentations was recognition of the influence of culture on ecological outcomes and the need to include native perspectives and traditional ecological knowledge in current research and management endeavors. The impacts of climate change and the mechanisms to bolster climate resilience on the landscape were also integral to many of the sessions.

With tribal elders opening and closing the conference, and the opportunity to tour the National Bison Range and Selis Ksanka Qlispe Dam, the history of both of which is mixed with issues of tribal sovereignty, the Roundtable provided a lens to consider the impact of jurisdiction on conservation management over time. With its intimate setting, and a structure designed to foster interaction, the conference enabled participants to learn from one another and forge and strengthen connections with others working on related issues.

The scale of the Crown region means bringing neighbors together takes a concerted effort, an outcome which the Roundtable serves admirably. In one case, managers of adjacent land parcels—who are based about 3.5 hours from each other—met for the first time. A university researcher remarked that attending the Roundtable challenges participants to look beyond their training and areas of expertise in order to seek out and encounter what is missing from one’s own perspective.



Tribal Management Issues in the Crown
Tuesday, September 24, 2019 at 1:45 PM

Panel 1 – Climate Change/Resilience

A speaker from each tribe determines the most important aspect of climate change/resilience to address. Each person speaks for a few minutes, followed by moderated open discussion.

Moderator: Germaine White, CSKT

Panelists:

- **Joshua Rosenau**, Program Coordinator, Salish Kootenai College Center for Tribal Research & Education in Ecosystem Sciences, CSKT
- **Janice Alpine**, Business Development Officer/Tourism Engagement, Ktunaxa Nation
- **Termaine Edmo**, Blackfeet Environmental Office, Blackfeet Nation
- **Mike Bruised Head**, Kainai Environmental Protection Association (KEPA) and University of Lethbridge, Blood Tribe

Germaine White, CSKT

- There is a spiritual and reciprocal relationship between humans and place, and a need to keep that relationship sustainable for future generations
- The tribes bring thousands of years of place-based knowledge
- Go to www.cskt.org to see their work in climate change outreach
- www.csktlivinglandscapes.org

Joshua Rosenau

- Climate change is a people-problem

Janice Alpine

- Humans have positioned ourselves in a reactive vs proactive situation
- What drives each of us to individually be proactive?
- “We talk to the land; it talks to us; it gives us our food.”

Termaine Edmo

- Blackfeet Nation is building resilience to extreme weather events through a beaver mimicry project
- We need to engage more youth
- Many groups and individuals are getting involved in the project, leading to success
- Check it out at www.blackfeetclimatechallenge.com

Panel 1 notes cont.

Mike Bruised Head

- Indigenous knowledge is more important than ever in the face of climate change
- We're in a generation of children born into oil, versus our natural environment
- Politics is destructive
- This issue is really bringing out the problem of our identity; and all of this is bringing us back to our own tribal identity, and all of you are welcome to join us. Blackfeet indigenous knowledge is going to be used now more than ever before.

Panel Summary

- Indigenous knowledge from place-based groups and a holistic view is critical in the face of climate change
- Closing the gap between western government/science and indigenous knowledge requires time, relationship-building, humility, and openness to different ways of understanding
- "Collaboration" is often considered a dirty word for the tribe; a euphemism for being overlooked
- Youth are the hope for merging knowledge and taking action on climate change



Tribal Management Issues in the Crown
Tuesday, September 24, 2019 at 3:30 PM

Panel 2 – Water

A speaker from each tribe determines the most important aspect of water to bring up to the group. Each person speaks for a few minutes, followed by moderated open discussion.

Moderator: Casey Ryan, CSKT

Panelists:

- **Rich Janssen**, Director Natural Resources, CSKT
- **Janice Alpine**, Business Development Officer/Tourism Engagement, Ktunaxa Nation
- **Gerald Wagner**, Blackfeet Environmental Office, Blackfeet Nation
- **Mike Bruised Head**, Kainai Environmental Protection Association (KEPA) and University of Lethbridge, Blood Tribe

Casey Ryan

- Elaborated on the challenges of water in a situation that is diverse, complex, and adaptive; new challenges and uncertainty are amplified by climate change; focus on the importance of looking forward to future generations.

Rich Janssen

- Presented overview of some DNR projects, including successes and ongoing challenges
- "Water is life...water is connected to everything; *showing extent of Flathead reservation*: We don't own anything- we borrow it from our ancestors. This is the land we occupy". 2013-2015; battle for water rights; large irrigation diversion; lower crow reservoir- south of Ronan for irrigation (BLM-funded for better irrigation). NPS (landowner areas; wetland area protection); treatment ponds in Ronan. No paint or treatment of docks in Flathead Lake. Reintroduced trumpeter swans on 9 pipe reservoir. Invasive lake trout (every fall harvest fish to sell to markets in NYC or Chicago). Restoring Jocko River to pre-contact conditions. Lower Flathead for recreation- flows to Columbia. 40% of steel-making coal from BC, just north of the border.

Janice Alpine

- Physical and emotional needs of humans are linked to what the environment provides

Panel 2 notes cont.

Gerald Wagner

- Presented overview of some Blackfeet Environmental Office projects
- Expressed gratitude for the groundwork done by CSKT and Fort Peck tribes
- Aboriginal treaty rights continue to be difficult to protect
- Blackfeet Nation enforces high water quality standards...higher and stricter than EPA; "We as tribes will maintain the standards and the level that we have. We have the knowledge and experience to protect our waters. [Given the current administration] it looks like our standards will be higher than the U.S." "The importance of water to our people...you can't go there without getting deep, deep, deep into it. Unless we put our minds, bodies and spirituality out there, we can't even talk about natural resources."

Mike Bruised Head

- Presents the question: can we bring back the buffalo realistically with the water quality affected by upstream mining?

Photo by Tony Bynum



In the Spirit of ʔAtatíçeʔ: The Untold Story of the National Bison Range

Movie Feature w/ Panel Discussion at Showboat Cinemas
Tuesday, September 24, 2019 at 7:00 AM

The 30-minute film shares the true story long told by Tribal elders but not widely shared until now. We learned how the unthinkable came to pass in the nineteenth century as buffalo, slaughtered to the edge of extinction, began to fade from the landscape until a Pend d'Oreille (Qlispe) man named ʔAtatíçeʔ and his son helped the bison survive by bringing buffalo calves over the Continental Divide and starting a herd on the Flathead Indian Reservation. In the face of devastation, one man did what he could and made a world of difference for us all.


The film depicts the Salish (Selish), Pend d'Oreille (Qlispe) and Kootenai (Ksanka) peoples' ongoing struggles, against the backdrop of seismic disruptions to their communities and cultures, to prevail in their efforts to care for the buffalo. Using a cross-section of Tribal members to relate their history, the Confederated Salish and Kootenai Tribes and filmmaker Daniel Glick produced *In the Spirit of ʔAtatíçeʔ: The Untold Story of the National Bison Range* to unveil a narrative that continues to reverberate today.

Moderator: Brian Upton, Attorney, CSKT

Panelists:

- **Shannon Clairmont**, Wildlife Biologist, CSKT
- **Robert McDonald**, Communications Director, CSKT
- **Roy Bigcrane**, Salish Kootenai College, CSKT

To watch the full movie visit
<https://youtu.be/S1WvkSN8zDQ>.



In the Spirit of ʔAtatíçeʔ:
The Untold Story of
the National Bison Range

A FILM PRESENTED BY THE
CONFEDERATED SALISH AND KOOTENAI TRIBES

Directed by Daniel Glick and produced by
Roy Bigcrane, Shane Morigeau, Brian Upton and Daniel Glick.

For more information, contact 406-249-1818 or email Robert.mcdonald@cskt.org

This event is supported by the
Maureen and Mike Mansfield Center,
The Wilderness Society, and the
National Wildlife Federation.

THE MAUREEN & MIKE
MANSFIELD
CENTER
AT THE UNIVERSITY OF MONTANA

The
Wilderness
Society

NATIONAL WILDLIFE FEDERATION

2019 Roundtable Conference Participants

USDA
University of Montana
Veteran Warrior Society
Waterton Lakes National Park
Western Landowners Alliance
Whitefish Legacy Project
Wild Earth Guardians

Alberta Conservation Association
Blackfeet Agriculture Resource
Management Plan
Blackfeet Community College
Blackfeet Nation
Bureau of Land Management

Kainai Nation
Center for Large Landscape Conservation
Crown of the Continent Geotourism Council
Confederated Salish Kootenai Tribes
CSKT Tribal Wildlife Program

Trust for Mutual Understanding
U.S. Fish and Wildlife Service,
National Bison Range Complex
U.S. Geological Survey
Blackfeet Nation Institutional
Review Board

“Connecting Land and Culture”

150+ Participants

55+ Speakers

50+ Organizations

Deep Rooted Wellness
Energy Keepers Inc.
Environmental Studies Program,
U of MT
Flathead Lake Biological Station, U of MT
Flathead Lakers

Nature Link Institute
Sun Tours
People’s Center
Piikani Lodge Institute
Salish Kootenai College,
Wildlife & Fisheries Department
Sierra Club

10+ County, State & Federal Agencies

6+ Tribes & First Nations

Flathead Land Trust
Forest Service
Glacier National Park
Heart of the Rockies Initiative
Humane Society

Montana Conservation Corp.
MT Department of Natural
Resource Conservation
MT Fish, Wildlife, and Parks
Montana State University
Nature Conservancy of Canada

Institute for Tourism and
Recreation Research, U of MT
Kaniksu Land Trust
Ktunaxa Nation
Missoula County
Montana Access Project

9th Annual Roundtable Conference - Speaker List

Tribal Management Issues: Panel 1

<i>Moderator</i>	Germaine	White	Confederated Salish & Kootenai Tribes
	Janice	Alpine	Business Development Officer/Tourism Engagement, Ktunaxa Nation
	Joshua	Rosenau	Salish Kootenai College Center for Tribal Research & Education in Ecosystem Sciences
	Mike	Bruised Head	Kainai Environmental Protection Association, University of Lethbridge, Blood Tribe
	Termaine	Edmo	Blackfeet Environmental Office

Tribal Management Issues: Panel 2

<i>Moderator</i>	Casey	Ryan	Confederated Salish & Kootenai Tribes
	Gerald	Wagner	Blackfeet Environmental Office
	Janice	Alpine	Business Development Officer/Tourism Engagement, Ktunaxa Nation
	Mike	Bruised Head	Kainai Environmental Protection Association, University of Lethbridge, Blood Tribe
	Richard	Janssen	Natural Resources Department, Confederated Salish & Kootenai Tribes

Crown Managers Partnership

	Mary	Riddle	Crown Managers Partnership, Glacier National Park
	Anne	Carlson	The Wilderness Society
	Brian	Marotz	Montana Fish, Wildlife, and Parks
	Melissa	Jenkins	US Forest Service
	Dawn	LaFleur	Glacier National Park
	Rich	Janssen	Natural Resources Department, Confederated Salish & Kootenai Tribes

Movie Feature

<i>Moderator</i>	Brian	Upton	Confederated Salish & Kootenai Tribes
	Shannon	Clairmont	Confederated Salish & Kootenai Tribes
	Robert	McDonald	Confederated Salish & Kootenai Tribes
	Roy	Bigcrane	Confederated Salish & Kootenai Tribes

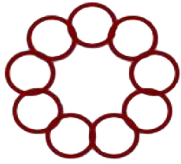
Keynote

	Vernon	Finley	Confederated Salish & Kootenai Tribes
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Breakout: Tourism & Recreation

Session 1	Norma	Nickerson	Institute for Tourism and Recreation Research, University of Montana
	Keith	Bosak	University of Montana
Session 2	Ed	DesRosier	Sun Tours
Session 3	<i>Moderator</i> Sheena	Pate	Crown of the Continent Geotourism Council
	Diane	Conradi	Montana Access Project

	Cole	Mannix	Western Landowners Alliance
	Alan	Myers-Davis	Whitefish Legacy Partners
Session 4	Jeff	Mow	Glacier National Park
	Locke	Marshall	Waterton Lakes National Park
Breakout: Holistic Health			
Session 1	Angelina	Gonzalez-Aller	Center for Large Landscape Conservation
	Brad	Hall	Blackfeet Community College, Blackfeet Nation Institutional Review Board
Session 2	Graham	Gaither	Blackfeet Agriculture Resource Management
	Heather	Harwood	Piikani Lodge Health Institute
	Kristy	Augare	Piikani Lodge Health Institute
Session 3	Leah	Webb	Deep Rooted Wellness
Session 4	<i>Moderator</i> Emily	Harkness	Heart of the Rockies Initiative
	Paul	Travis	Flathead Land Trust
	Richard	Klafki	Nature Conservancy of Canada
	Regan	Plumb	Kaniksu Land Trust
Breakout: Natural Resources			
Session 1	Barry	Hanson	Natural Resources Department, Confederated Salish & Kootenai Tribes
Session 2	Sara	Alberts	United States Department of Agriculture
Session 3	Bruce	Maxwell	Montana Institute on Ecosystems, Montana State University
Session 4	Janene	Lichtenberg	Wildlife & Fisheries Department, Salish Kootenai College, CSKT
	Tabitha	Graves	U.S. Geological Survey
Breakout: Connectivity			
Session 1	Jim	Williams	Montana Fish, Wildlife, and Parks
	Kris	Tempel	Montana Fish, Wildlife, and Parks
	Alan	Wood	Montana Fish, Wildlife, and Parks
Session 2	<i>Moderator</i> Len	Broberg	Environmental Studies Program, University of Montana
	Dale	Becker	Tribal Wildlife Program, Confederated Salish & Kootenai Tribes
	Cassie	Powell	Grizzly Bear Conflict Prevention, Blackfeet Fish & Wildlife
	Dawn	LaFleur	Glacier National Park
Session 3	<i>Moderator</i> Len	Broberg	Environmental Studies Program, University of Montana
	John	Steuber	United States Department of Agriculture
	Paul	Jones	Alberta Conservation Association
	Gary	Burnett	Heart of the Rockies Initiative



Roundtable on the Crown of the Continent
Connecting People to Sustain & Enhance Culture, Community, & Conservation

Highlights & Quotes

9th Annual Roundtable Conference

From 2019 Evaluation Form

What portion or aspect of the conference did you like the most?

“Size of the conference was excellent, as was the laid-back atmosphere and opportunities for making new connections. Appreciated that the first panel discussed climate change and was led by Indigenous communities. Lovely people! Wonderful to have tribal college students.”

“Great presentations and networking opportunities.”

“I loved the presentations and tribal participation.”

“Awesome field trips.” “A breath of knowledge.”

“I loved the diversity and variety of topics.”

“The Indigenous involvement was great!”

“Networking opportunities.” “Very well organized.”

“Building relationships with participants.”

“I like the smaller group breakouts balanced with sessions/activities where we were all together.”

“Common goals of land and water conservation stewardship.”

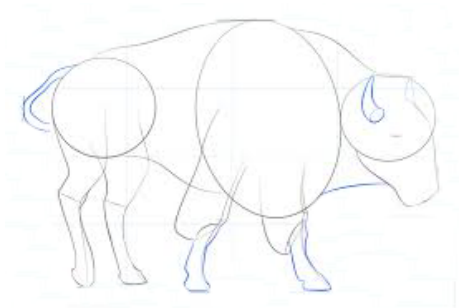
“I liked seeing how many agencies and organizations prioritize attendance and dig into the conversation.”

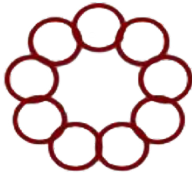
“The Holistic Health Breakout Session was very unique with great topics and speakers.”

“I love the opportunity to continue to have conversations and strengthen connections.”

“I loved the diversity of the speakers and attendees, including First Nations and multidisciplinary presence.”

“I enjoyed the diversity of tribes and stakeholders that were represented at the conference.”





Roundtable on the Crown of the Continent

Connecting People to Sustain & Enhance Culture, Community, & Conservation

9th Annual Conference “Connecting Land and Culture” September 24-26, 2019 Kwataqnuq, Polson, MT

About the Annual Conference

This year’s conference will focus on strengthening the land-culture connection. Together over the next three days we’ll look at how a number of currently pressing topics are playing out in the landscape, and then provide the space to have conversations among our diverse collaborators regarding the opportunities and challenges surrounding these issues.

What we’re doing here in Polson

- Exchanging new information and ideas regarding culture, community and conservation
- Connecting people and organizations working on similar issues within our landscape
- Fostering a sense of regional identity and stewardship for the Crown
- Exploring specific, relevant, and currently challenging issues in-depth

About the Roundtable on the Crown of the Continent

The Crown of the Continent region is a remarkable, ecologically intact ecosystem rich in tribal history, natural resources, and resilient communities. However, this 18-million-acre region is challenged by climate change, loss of traditional knowledge, and both over and under development. The Roundtable on the Crown of the Continent addresses these challenges by providing a forum for collaboration and networking among Tribes/First Nations, land management agencies, local governments, private land partnerships, academia, conservation groups, businesses, and industry.

Large landscape conservation is participatory and inclusive and the Roundtable connects people to enhance the culture, communities, and conservation of the region. Our transboundary, large landscape effort provides a platform for diverse perspectives to share information, build knowledge and capacity, celebrate success, and catalyze new efforts and partnerships. The Roundtable seeks to achieve a shared vision for people and nature in the region. For more information, please go to crownroundtable.net.

9TH ANNUAL CONFERENCE AGENDA
“Connecting Land and Culture”
September 24-26, 2019 - Kwataqnuq, Polson, MT

Tuesday, September 24

10:00 AM **Conference welcome booth opens**
Registration tables downstairs
Field trip signup forms at registration tables
Speakers: Please have your presentations ready to upload

12:30 PM **CONFERENCE CONVENES: Welcome, Prayer & Introduction**
Rich Janssen, Director Nat. Resources, CSKT
Honor Guard, Veteran Warrior Society, Presentation of Colors
Ronald Trahan, Chairman, Tribal Council, CSKT
Steven Small Salmon, Salish-Qlispe Elder
Laura Caplins, Roundtable Leadership Team

1:30 **BREAK**

1:45 **Panel 1 – Tribal Management Issues in the Crown: Climate Change/Resilience**

A speaker from each tribe determines the most important aspect of climate change/resilience to address. Each person speaks for a few minutes, followed by moderated open discussion.

Moderator: Germaine White, CSKT

Panelists:

- **Joshua Rosenau**, Program Coordinator, Salish Kootenai College Center for Tribal Research & Education in Ecosystem Sciences, CSKT
- **Janice Alpine**, Business Development Officer/Tourism Engagement, Ktunaxa Nation
- **Termaine Edmo**, Blackfeet Environmental Office, Blackfeet Nation
- **Mike Bruised Head**, Kainai Environmental Protection Association (KEPA) and University of Lethbridge, Blood Tribe

3:15 **BREAK**

3:30 **Panel 2 – Tribal Management Issues in the Crown: Water**

A speaker from each tribe determines the most important aspect of water to bring up to the group. Each person speaks for a few minutes, followed by moderated open discussion.

Moderator: Casey Ryan, CSKT

Panelists:

- **Rich Janssen**, Director Natural Resources, CSKT
- **Janice Alpine**, Business Development Officer/Tourism Engagement, Ktunaxa Nation
- **Gerald Wagner**, Blackfeet Environmental Office, Blackfeet Nation
- **Mike Bruised Head**, Kainai Environmental Protection Association (KEPA) and University of Lethbridge, Blood Tribe



4:45 **Crown Café 1**

Roundtable conference participants sound off about their organization and current happenings, needs, etc. Open mic, 3-5 minutes per speaker.

5:30 **Dinner at Kwataqnuk**

7:00 **Movie Feature w/ Panel Discussion at Showboat Cinemas**

In the Spirit of ?Atatíçe?: The Untold Story of the National Bison Range

Showboat Cinemas, 416 Main St, Polson, MT 59860 Phone: 406.883.5606

The 30-minute film shares the true story long told by Tribal elders but not widely shared until now. Audiences will learn how the unthinkable came to pass in the nineteenth century as buffalo, slaughtered to the edge of extinction, began to fade from the landscape until a Pend d'Oreille (Qlispe) man named ?Atatíçe? and his son helped the bison survive by bringing buffalo calves over the Continental Divide and starting a herd on the Flathead Indian Reservation. In the face of devastation, one man did what he could and made a world of difference for us all.

The film depicts the Salish (Selish), Pend d'Oreille (Qlispe) and Kootenai (Ksanka) peoples' ongoing struggles, against the backdrop of seismic disruptions to their communities and cultures, to prevail in their efforts to care for the buffalo. Using a cross-section of Tribal members to relate their history, the Confederated Salish and Kootenai Tribes and filmmaker Daniel Glick produced *In the Spirit of ?Atatíçe?: The Untold Story of the National Bison Range* to unveil a narrative that continues to reverberate today.

Moderator: Brian Upton, Attorney, CSKT

Panelists:

- **Shannon Clairmont, Wildlife Biologist, CSKT**
- **Robert McDonald, Communications Director, CSKT**
- **Roy Bigcrane, Salish Kootenai College, CSKT**



Photo by Tony Bynum

Wednesday, September 25

7:30 **Coffee and Pastries**

7:45 **Good Morning & Coming Together**
Connect with Your Roundtable Partners – Introduction to Bingo Activity & Prizes

8:30 **Breakout Session 1** (60 minutes each, Please select one breakout to attend)

Tourism & Recreation: Reflections on the Crown

Norma Nickerson, Director, Institute for Tourism and Recreation Research, University of Montana
Current State of Tourism in the Crown – The many faces of tourism are alive and well in the Crown of the Continent. From “people” closures in the national parks to community growth, the visitor industry provides the opportunities for small businesses, challenges with visitor behavior, and concerns with open space.

Keith Bosak, Professor, University of Montana

Tourism and Protected Areas: Lessons from Afar – This talk will focus on lessons learned from experiences with sustainable tourism initiatives around the world and how some of those lessons might be applied in the Crown.

Holistic Health: Landscapes of Justice: Diversity, Equity and Inclusion in Conservation

Angelina Gonzalez-Aller, Climate Resilience Program Manager, Center for Large Landscape Conservation

Dr. Brad Hall, Institutional Researcher, Blackfeet Community College and Interim Chair, Blackfeet Nation Institutional Review Board (BNIRB)

Through a discussion on the issues of diversity, inclusion, and equity in conservation we will explore how conservation-oriented projects can better maximize beneficial outcomes. The talk will connect conservation and non-profit work to the social determinants of health, illustrating how projects that work towards the goals of Indigenous leadership and capacity building benefit everyone.

Natural Resources: Native Fish Keepers

Barry Hansen, Fisheries Biologist, Natural Resources Dept., CSKT

Presentation exploring the role of corporations in conservation. The CSKT have close cultural ties to native fish and wildlife and have long relied on them for subsistence and spiritual needs. Non-native lake trout threaten tribal values by diminishing native trout abundance.

Connectivity: Habitat Protection, Public Recreation Access, and Working Landscapes

Jim Williams, Montana Fish, Wildlife, and Parks (FWP)

Kris Temple, Montana Fish, Wildlife, and Parks

Alan Wood, Montana Fish, Wildlife, and Parks

How FWP Approaches Land Conservation – This talk will delve into the creative tactics FWP has employed to accomplish landscape-scale habitat protection while providing public recreation access and maintaining compatible working landscapes with an eye towards future possibilities.

9:30 **BREAK**

9:45

Breakout Session 2 (60 minutes each, Please select one breakout to attend)

Tourism & Recreation: Native Lands as Tourism Economics

Ed DesRosier, Owner/Operator, Sun Tours

Exploration of business opportunities. Recognition of Blackfeet presence in Tourism. Blackfeet Interpretation and sharing of accurate information with visitors.

Holistic Health: Holistic Thinking About Landscapes and Health

Graham Gaither, Land/Water Conservation Planner, Blackfeet Agriculture Resource Management Plan

This talk will focus on how Piikanii (Blackfeet) lifeways and values inform the planning of the Tribe's resources, from water, land, plants and animals to agricultural resources and cultural artifacts. In honoring Amskapi Piikanii beliefs we are also incorporating culture, language and ceremony into healing cultural camps. This way of healing, based on our connections to the land, are helping to build our future with a strong foundation of Blackfeet ways of knowing.

Natural Resources: Mushroom Madness

Sara Alberts, District Timber Management Assistant, Three Rivers RD, USDA Forest Service

Presentation on the management of commercial and personal-use mushroom harvesting following the fire season of 2017. It will cover some of the biology of morel mushrooms, but more of the aspects of the challenges associated with managing for the influx of people interested in picking morels.

Connectivity: Roads and Wildlife

Presentations and moderated discussion

Moderator: Len Broberg, Professor, Environmental Studies Program, University of Montana

Dale Becker, Tribal Wildlife Program Manager, CSKT

U. S. Highway 93 Wildlife Crossing on the Flathead Indian Reservation: Road Ecology and a Learning Process in Action – A focus on the construction of 43 wildlife crossing structures. In reconstructed segments of the highway, the structures and other wildlife mitigation features have been monitored for wildlife use. The presentation will discuss this example of road ecology and its ongoing lessons for future projects.

Cassie Powell, Grizzly Bear Conflict Prevention Specialist, Blackfeet Fish & Wildlife

Blackfeet Animal/Vehicle Collision Master Data Plan – Introduction to the Blackfeet plan and how it addresses roads and wildlife.

Dawn LaFleur, Restoration Biologist, Glacier National Park

Terrestrial Invasive Connectivity – Introduction to the nature of terrestrial invasive plants. How connectivity impacts the resilience of non-native invasive plants. Roads are the primary vectors for dispersal of non-native invasive plant species.

10:45

BREAK

11:00 **Crown Managers Partnership Project Overview**

Mary Riddle, Co-Chair of Crown Managers Partnership, Chief of Planning for Glacier NP

Overcoming Jurisdictional Boundaries in a Shared Landscape with Shared Issues & Fire on the Landscape– who and what is the Crown Manager's Partnership? Why the CMP started and our vision. Introduction of the speakers who will discuss projects of the CMP.

Anne Carlson, Senior Climate Adaptation Specialist, The Wilderness Society

Native Salmonids as a Conservation Priority for the Crown Managers Partnership – Since 2014, the Crown Managers Partnership has been working collaboratively with agency staff, Tribes and First Nations, conservation organizations, private land trusts, and universities to develop a long-term conservation blueprint for these highly valued species that seeks to share and replicate best practices, coordinates strategies across the Crown, and uses the best available science as a foundation.

Brian Marotz, Hydropower Mitigation Coordinator, Montana Fish, Wildlife, and Parks

The Big Picture – A 20,000ft view on areas where the state is coordinating with the Tribes on Native Salmonid work. The presentation will include projects in completion or in progress for Native Salmonids around climate change, dams, water-ways, etc.

Melissa Jenkins, Forest Silviculturist, US Forest Service

CCE Pilot Whitebark Pine Restoration Strategy – A pilot whitebark pine restoration strategy has been completed for a subset of the CCE that includes Glacier NP, Flathead NF, and the Confederated Salish and Kootenai Tribal Lands. The presentation will cover the pilot strategy process, findings, and next steps. The process that was established through the pilot will be used to complete a Crown-wide restoration strategy for both whitebark and limber pine.

Dawn LaFleur, Restoration Biologist, Glacier National Park

Terrestrial Invasives – Status and management of non-native plants in the Crown ecosystem

Rich Janssen, Director Nat. Resources, Confederated Salish & Kootenai Tribes (CSKT)

Relating these diverse projects to tribal lands and relevant tribal natural resource issues.

12:30 **Lunch / Roundtable It over Lunch** with **Shawn Johnson**, University of Montana



“CONNECTING LAND AND CULTURE” – AGENDA

2:00 – 5:00 **Field Trips** (Please select one field trip to attend)

1:45 – 5:00 **National Bison Range Tour**

Amy Coffman, Refuge Manager & **Amy Lisk**, Biologist of the National Bison Range Complex, US Fish and Wildlife Service

Bus will depart at 1:45 in front of Kwataqnuq and can hold 16 people. An additional 14 people can drive themselves (carpool encouraged) to: Visitor Center, 58355 Bison Range Rd, Charlo, MT

2:00 – 4:30 **Selis Ksanka Qlispe Dam Tour**

Casey Ryan, CKST Natural Resources Dept., and **Dustin Shelby** of Energy Keepers Inc.

Bus will depart at 2:00 in front of Kwataqnuq and can hold 30 people. Participants MUST wear closed toed shoes and long pants are highly encouraged.

3:00 – 4:00 Tour 1 **Flathead Lake Boat Tour**

4:00 – 5:00 Tour 2

Phil Matson, Flathead Lake Biological Station, University of Montana

Boat tour discussing water quality, long term monitoring, the food web, and aquatic invasive species in Flathead Lake.

Each tour can hold 20 people aboard the small research vessel. Meet at Kwataqnuq Dock 10-minutes prior to departure.

3:00 – 4:00 Tour 1 **Sqelixw-Aqlsmaknik (The People’s Center) Tour**

4:00 – 5:00 Tour 2

Marie Torosian, People's Center Director & **Maggie Sheridan**, Education Coordinator of the People Center

Heritage, history, and culture of the Salish, Pend d'Oreille and Kootenai tribes. Self-guided exploration available before or after the guided tour until 5:00 pm. Drive yourself: 56633 Highway 93, Pablo, MT 59855 Phone: 406.675.0160



6:00 **Happy Hour**

6:30 **Dinner – Keynote Speaker: Vernon Finley, CSKT**

Thursday, September 26

7:30 **Coffee and Pastries**

7:45 **Good Morning & Coming Together**

8:00 **Breakout Session 3** (60 minutes each, Please select one breakout to attend)

Tourism & Recreation: Supporting Recreation into the Future

Presentation followed by moderated discussion

Moderator: Sheena Pate, Project Coordinator, Crown of the Continent Geotourism Council

Diane Conradi, Founder, Montana Access Project

Diane has a state-wide perspective and will explore the economics of front-country recreation.

Cole Mannix, Associate Director, Western Landowners Alliance

Montana Outdoor Heritage Project (MOHP) is a state-wide conversation project taking place this summer that explores the need for increased state conservation funding.

Alan Myers-Davis, Whitefish Legacy Partners

The Whitefish Trail – Outdoor recreation on the Whitefish Trail brings real tourism dollars to our community through increased visitor spending. As recreation amenities get more usage, learn how the Whitefish Trail funds maintenance and plans for the future.

Holistic Health: Reimagining Soil Conversation to Support Healthy Communities

Leah Webb, MPH, Author and Food Educator, Deep Rooted Wellness

Small communities represent unique opportunities for enhanced localized health and economic development through ecologically diverse farming practices.

Natural Resources: Climate Change Impacts in Montana

Bruce Maxwell, Co-Director & Professor, MT Institute on Ecosystems, MSU

This talk will cover current climate patterns and projections for Montana. Climate change impacts will focus on water, agriculture, and forestry.

Connectivity: Preserving Connections on Private Lands

Presentations and moderated discussion

Moderator: Len Broberg, Professor, Environmental Studies Program, University of Montana

John Steuber, State Director/Supervisory Wildlife Biologist, USDA APHIS Wildlife Services

Discussion of USDA Wildlife Services' Collaborative Program with the Natural Resource Defense Council and Defenders of Wildlife.

Gary Burnett, Executive Director, Heart of the Rockies Initiative

An overview of a landowner-led partnership for reducing human-wildlife conflict.

Paul Jones, Wildlife Biologist, Alberta Conservation Association

A discussion regarding the implications of fencing on wildlife.

9:00 **BREAK**

9:15 **Breakout Session 4** (60 minutes each, Please select one breakout to attend)

Tourism & Recreation: Transboundary Tourism in the Crown

Jeff Mow, Superintendent, Glacier National Park

Locke Marshall, Visitor Experience Manager, Waterton Lakes National Park

The nature of climate change, tourism, and wildfires are highly variable from year to year and managers and their organizations are increasingly being forced to adapt in the face of uncertainty. Engagement of partners will be foundational to navigating the challenges moving forward.

Holistic Health: Holistic Health of Human and Natural Systems: Where do Land Trusts Fit In?

Presentations and moderated discussion

Moderator: Emily Harkness, Project Coordinator, Heart of the Rockies Initiative

Paul Travis, Executive Director, Flathead Land Trust

Richard Klafki, Canadian Rocky Mountains Program Director, Nature Conservancy of Canada

Regan Plumb, Conservation Director, Kaniksu Land Trust

This panel is an opportunity for different land trusts to talk about their role both locally and on a landscape-scale, and to showcase the unique projects they're working on that support the needs, health, and socio-ecological issues of the communities they serve.

Natural Resources: Huckleberries and Pollinators

Janene Lichtenberg, Wildlife & Fisheries Dept. Head, Salish Kootenai College

Tabitha Graves, Research Ecologist, U.S. Geological Survey

Huckleberries hold importance to our past and present. They are also valuable to many wildlife species. Pollinators, especially bumble bees, share a mutualistic relationship with huckleberry plants.

10:15 **BREAK**

10:30 **Roundtable It – Looking Ahead: Shawn Johnson**, University of Montana

In small groups, participants reflect on the central theme of the conference and how they can move forward with their work.

11:30 **Bingo Prizes Announced**

12:00 **CONFERENCE ADJOURNS: Closing Remarks & Prayer**

Rich Janssen, Director Nat. Resources, Confederated Salish & Kootenai Tribes (CSKT)

Honor Guard, Veteran Warrior Society, Removal of Colors

12:30 **Roundtable Leadership Team Meeting**

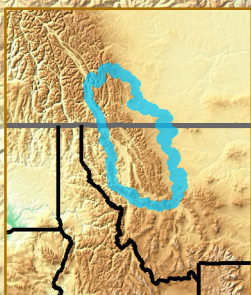
Crown of the Continent Ecosystem



Roundtable on the Crown of the Continent
Connecting People to Sustain & Enhance Culture, Community, & Conservation

CANADA

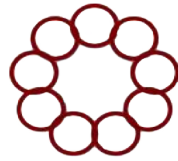
MONTANA



Author: Kendall Edmo
Organization: The Center for Large Landscape Conservation

Data Sources:
USGS, U.S. Census Bureau, Great Northern Landscape Conservation Cooperative, Esri, ArcCanada 3.1, Esri Canada Education and Research
Base Map Source: Airbus, USGS, NGA, NASA, CGIAR, NLS, OS, NMA, Geodatastyrelsen, GSA, GSI and the GIS User Community

CENTER
FOR LARGE
LANDSCAPE
CONSERVATION

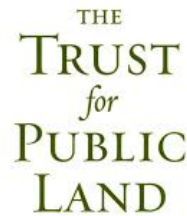
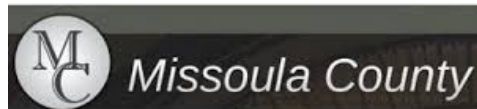


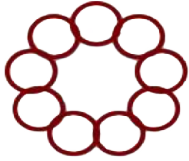
Roundtable on the Crown of the Continent
Connecting People to Sustain & Enhance Culture, Community, & Conservation

Thank you to our conference sponsors!



Teck





Roundtable on the Crown of the Continent

Connecting People to Sustain & Enhance Culture, Community, & Conservation

Leadership Team 2019

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18	Shaun	McGrath	shaun.mcgrath@mt.gov	MT Department of Environmental Quality
19	Shawn	Johnson	shawn.johnson@umontana.edu	University of Montana

Crown Managers Partnership Project Overview

Wednesday, September 25, 2019 at 11:00 AM

Mary Riddle, Co-Chair of Crown Managers Partnership, Chief of Planning for Glacier NP
Overcoming Jurisdictional Boundaries in a Shared Landscape with Shared Issues & Fire on the Landscape– who and what is the Crown Manager's Partnership? Why the CMP started and our vision. Introduction of the speakers who will discuss projects of the CMP.

- The Crown is an area of jurisdictional complexity
- The CMP allows organizations to pool funding across political boundaries
- Presents CMP strategic plan, vision statement, and priority projects

Anne Carlson, Senior Climate Adaptation Specialist, The Wilderness Society
Native Salmonids as a Conservation Priority for the Crown Managers Partnership – Since 2014, the Crown Managers Partnership has been working collaboratively with agency staff, Tribes and First Nations, conservation organizations, private land trusts, and universities to develop a long-term conservation blueprint for these highly valued species that seeks to share and replicate best practices, coordinates strategies across the Crown, and uses the best available science as a foundation.

The Crown is a stronghold for both bull trout and westslope cutthroat trout, although both species face significant challenges in an era of shifting climate. Increasing stream temperatures are expected to reduce the availability of suitable habitat for bull trout and increase levels of hybridization between westslope cutthroat trout and non-native rainbow trout.

- The CMP began at the Roundtable
- Engaged within the Crown to identify areas of overlap and priorities for work. Following a survey, then voted, they arrived at 7 shared conservation priorities, and native salmonids arose as first priority to address
- CMP - seeking to use indigenous knowledge for conversation moving forward
- Understanding the ongoing work across spatial and temporal scales

Brian Marotz, Hydropower Mitigation Coordinator, Montana Fish, Wildlife, and Parks
The Big Picture – A 20,000ft view on areas where the state is coordinating with the tribes on Native Salmonid work. The presentation will include projects in completion or in progress for Native Salmonids around climate change, dams, water-ways, etc.

- Described how the state is coordinating with tribes on native salmonids and working with human modifications across the Crown
- Rehabilitation projects are taking advantage of barriers (new and existing) to accomplish effective treatments to fully remove non-native species &/or reintroduce native salmonids

CMP notes cont.

- Genetics that lead to fitness remain unknown, being worked on
- Genetic conservation and experiments – using aboriginal populations of westslope cutthroat trout to reestablish populations (potentially could use with bull trout in the future)
- Hungry Horse Dam – tributary habitat – so how to offset habitat loss?
 - Proactively altering temperature of the rivers via dam discharge can combat some temperature changes from climate change

Melissa Jenkins, Forest Silviculturist, U.S. Forest Service

CCE Pilot whitebark Pine Restoration Strategy – A pilot whitebark pine restoration strategy has been completed for a subset of the CCE that includes Glacier NP, Flathead NF, and the Confederated Salish and Kootenai Tribal Lands. The presentation will cover the pilot strategy process, findings, and next steps. The process that was established through the pilot will be used to complete a Crown-wide restoration strategy for both whitebark and limber pine.

- Flathead National Forest
- Whitebark is keystone species at high elevations
- Fatty nutritious seed, important for lots of wildlife, watershed protection
- Whitepine blister rust – introduced disease from Asia then Europe, attacks all 5-needle pines – decimating population
- The Crown of the Continent has highest mortality of the whole range
- 80-90 % affected in crown studies from 90s to now
- Chose smaller areas for pilot study to develop strategy – Glacier NP + Flathead NF + CSKT lands
- Complexity here and different context from restoration efforts elsewhere required creation of new strategy
- Clark's nutcracker is SOLE disperser of seeds – up to seeds in pouch, 30k or less, 100k seeds in a single year – can recover through 2 feet of snow
- Research used priority ecosystem services and current-future capability to identify core areas to reestablish populations for conservation restoration

Dawn LaFleur, Restoration Biologist, Glacier National Park

Terrestrial Invasives – Status and management of non-native plants in the Crown ecosystem.

- Development of user-friendly field guide on invasive plants for general audiences – both professionals and general public – communication of presence/absence
- 2009 first print 10K copies went fast, later reprints
- Free/suggested donations – lots of partners

CMP notes cont.

- In 2015 as part of initiative with CMP. Reprints will include more species and native lookalikes. Reprints are expected to be released late 2020 to early 2021
- Available online through CMP website



Breakout: Tourism & Recreation

Session 1: Reflections on the Crown
Wednesday, September 25, 2019 at 8:30 AM

Norma Nickerson, Director, Institute for Tourism and Recreation Research, University of Montana
Current State of Tourism in the Crown – The many faces of tourism are alive and well in the Crown of the Continent. From “people” closures in the national parks to community growth, the visitor industry provides the opportunities for small businesses, challenges with visitor behavior, and concerns with open space.

Keith Bosak, Professor, University of Montana
Tourism and Protected Areas: Lessons from Afar – This talk will focus on lessons learned from experiences with sustainable tourism initiatives around the world and how some of those lessons might be applied in the Crown.

Norma Nickerson

- Glacier NP draws more people to Montana than Yellowstone NP
- Airport access important part of tourism – we’re seeing communities and airlines partner on strategies
- The short-term rental is really affecting home prices and lifestyles, especially in gateway communities
- The whole Crown is affected by what goes on in the National Parks

Keith Bosak

- Successful sustainable tourism requires:
 1. Planning that prepares for visitors and is also comprehensive across the landscape
 2. Local involvement and collaboration, and the representation of local values in how tourism is offered (i.e., not only economic)
 3. Visitor characteristics and character of place are linked and important

Discussion

- The expected future of tourism in the Crown is unprecedented – and if National Parks are at capacity, how can local areas prepare for this? Some, like the National Bison Range, are already having these discussions

Session 2: Native Lands as Tourism Economics

Wednesday, September 25, 2019 at 9:45 AM

Ed Des Rosier, Owner/Operator, Sun Tours

Exploration of business opportunities. Recognition of Blackfeet presence in Tourism. Blackfeet interpretation and sharing of accurate information with visitors.

- Presented the history of Sun Tours, as the first private Blackfeet operator in Glacier National Park. Early hardships such as arrests eventually gave way to being awarded a concession from the NPS (but not as recognition of treaty rights)
- Notes that traveler audience is changing – increasing interest in heritage tourism, authentic and unique to place – in learning, culture, dispelling false histories
- Hoping for return of buffalo to the area
- Bilingual signage and mixed cultural and historical interpretation take cooperative efforts

Session 3: Supporting Recreation into the Future

Thursday, September 26, 2019 at 8:00 AM

Moderator: Sheena Pate, Project Coordinator, Crown of the Continent Geotourism Council

Diane Conradi, Founder, Montana Access Project

Diane has a state-wide perspective and will explore the economics of front-country recreation.

Cole Mannix, Associate Director, Western Landowners Alliance

Montana Outdoor Heritage Project (MOHP) is a state-wide conversation project taking place this summer that explores the need for increased state conservation funding.

Alan Myers-Davis, Whitefish Legacy Partners

The Whitefish Trail – Outdoor recreation on the Whitefish Trail brings real tourism dollars to our community through increased visitor spending. As recreation amenities get more usage, learn how the Whitefish Trail funds maintenance and plans for the future.

Diane Conradi

The Whitefish community's investment in trails close to town, public access to protected, open lands and a high-quality well-maintained trail network pays dividends. A 2018 study concluded the community investment in conservation, recreation and education is generating a return of \$6.4 million per year.

Cole Mannix

The Montana Outdoor Heritage Project (MOHP) is a state-wide conversation taking place this summer surrounding the need for increased state conservation funding related to working lands, wildlife, state parks, and outdoor recreation.

Precedents for state-level conservation funding include well known programs such as Wyoming Wildlife and Natural Resource Trust and Great Outdoors Colorado. Ways to participate are by taking the survey and participating in state-wide community conversations across the state.

Alan Myers-Davis

Connecting people with the landscape to increase support for conservation

Discussion

Can tourism, conservation, and recreation coexist?

“It has to because it’s happening”

Session 3 notes cont.

People tend to get outdoors close to their homes, their most regular access, and through developed infrastructure - “adored and ignored” – and we need to be proactive in developing recreation infrastructure.

One can’t afford to think of only a single jurisdiction (i.e. private vs. state)– we need to discuss the issues that extend across the landscape – if we do not, the result will be fragmentation – we need to bring different communities and voices to the table.

Communities surrounding Glacier can take off some of the pressure – we need recreational infrastructure that can take some of the pressure off as well.

Example: “Dames of the Range” – collaborative effort

Montana Outdoor Heritage Project - partnership of NGOs over summer – big Montana survey and series of 50 chats– results coming out in October

What do you care about MT outdoor heritage and what do you think about funding needs? State parks, Trails, wildlife, working lands?

Realistic cost of coexistence predators is significant – can’t just rely on federal grants and underfunded by state – so what are mechanisms we can utilize moving forward?

Flathead lake – 89% privately owned 3.8% developed public access – 1/4 of 3.8 is Big Arm State Park (1 mi frontage) - which was at risk of being lost by 2020 (legislature stepped up to protect)

Potential of Missouri Headwaters – halfway between Glacier and Yellowstone – Senate Bill 24 – it’s an opt-out for taxes – went from \$6 to \$9 “Made in Montana” funded

How to get it done? Mish-mash of funding – endowment important for WLP, specifically for maintenance work (750K was placed into this restricted fund – now just over 1million) – augmented with Adopt-a-trail program (has 15 sponsors at 1k/year for 3 years) State spends millions to bring people here for tourism – but no circle back to help state maintain! Exception! - resort tax – so there is a mechanism/creative strategy (but only for capital improvements, not maintenance – reallocation of that tax could occur)

Reinvesting in America’s Wildlife Act (RAWA) – new funding source – recognizes tribes – first Bill ever to do so – or if tribes could be included in current bills when reauthorized, they could match, because of opportunities for federal funding but has to be matched by state.

Session 3 notes cont.

How to enhance and maintain our golden goose?

- Get to know one another first, and then can work together
- Invest in landscape as a whole
- Keep carrying conversations forward and be involved in our communities

Lots of talk about *doing*, but not a lot about *how to do*...

Recreation innovation lab – a HOW-TO – in Whitefish, but NOT just about Whitefish – planning, volunteers, funding – Oct 10-11

Want to come? Land managers, owners, NGOs – legal deep dive into access

Go to website for MT office of outdoor recreation

MT Access website

Facebook – “Recreation Innovation Lab”

Session 4: Transboundary Tourism in the Crown

Thursday, September 26, 2019 at 9:15 AM

Jeff Mow, Superintendent, Glacier National Park

Locke Marshall, Visitor Experience Manager, Waterton Lakes National Park

The nature of climate change, tourism, and wildfires are highly variable from year to year and managers and their organizations are increasingly being forced to adapt in the face of uncertainty. Engagement of partners will be foundational to navigating the challenges moving forward.

Locke Marshall

- Visitation increasing steeply - 2017 was a peak year for visitation
- Asset sustainability is an increasing priority with increased visitation
- 2017- Kenow fire -38% of the park burned, closure, evacuation
- Kenow – presented opportunity for archeological work as new sites were uncovered
- Ongoing challenge: how to give visitors appropriate expectations and help them to find meaning in the visitor experience?
- One method: Waterton is encouraging off-peak and off-season visitation

Jeff Mow

“Navigating the “Sweet Spot” with all Hands-on Deck: A grab bag year of uncertainty”

- Glacier is at the “sweet spot” of vulnerability
 - Ecologically - because of its mid-level elevation
- Instilling new traditions to return juxtaposition of people and place to Glacier, working with Blackfeet to bring back sense of cultural landscape
- Uncertainty and adaptability - vulnerability to fire
- Vulnerability – visitation – impact to visitor experience and wildlife
 - One action from the park: RAD “Recreational Access Display”, used in tourist locations like hotels, airport
 - Still new; waiting to see effects and unanticipated consequences
- Data collection is key as it helps inform management decisions
- Glacier was the first of the western U.S. parks to reach 1 million visitors in one month: July 2017
 - 600-700,000 visitors/month seems to currently be a good carrying capacity for the park
 - Infrastructure is not as adaptable as it needs to be for fluctuations in visitations that accompany weather uncertainties
- Visitor identities are shifting – more adventure and selfie-driven visitors – showing a juxtaposition of urban values in wilderness settings
- Increasing EMS and SAR calls – park is trying to proactively cut down on this – one method is to send out preventative SAR, checking on people before they head into hazardous situations
- E-bikes? New technology. What will be the consequences? How to prepare for and manage?

Session 4 notes cont.

- What happens as boomers become less active?
- Partnerships for Peace – transboundary conservation aiming for global impact
- Dark Sky Park – new resource, for which Glacier was not established - but increasing global human value
- Native America Speaks – blurring lines (both physical boundaries and intangible) between National Park and Reservation through this partnership
 - Protecting sacred sites across a shared landscape
- Sweet spot of opportunity: returning bison
 - Culture, community, and conservation. It is a challenge and an opportunity that these attributes, these values, are integrated

Breakout: Holistic Health

Session 1: Landscapes of Justice: Diversity, Equity and Inclusion in Conservation

Wednesday, September 25, 2019 at 8:30 AM

Angelina Gonzalez-Aller, Climate Resilience Program Manager, Center for Large Landscape Conservation

Dr. Brad Hall, Blackfeet Community College and Interim Chair, Blackfeet Nation Institutional Review Board (BNIRB), Tribal Outreach Specialist, University of Montana

Angelina Gonzalez-Aller and Dr. Brad Hall explored how conservation groups and tribes can build partnerships that not only advance conservation goals but also address and mitigate historical injustices. Through a discussion on the issues of diversity, inclusion, and equity in conservation they explored how conservation-oriented projects can maximize beneficial outcomes. The talk connected conservation and non-profit work to the social determinants of health, illustrating how projects that work towards the goals of Indigenous leadership and capacity-building benefit everyone.

Exclusion and Whiteness in Conservation

- National Parks were created through systematically and violently dispossessing Indigenous peoples of their homelands
- Working through the Blackfeet Nation IRB (BNIRB) for research projects ensures that there is a connection and direct benefit to Blackfeet Nation

Conservation Today

- 85% of environmental staff is white. This is both a problem as well as an opportunity
- As the racial and ethnic composition of the country continues to diversify, the conservation movement must find ways to bring marginalized groups into the fold
- In working with marginalized groups, communities' interests and goals should become part of your interests and goals

How are Jobs related to Health?

- By protecting natural resources like land, air, and water, the conservation movement has had a major impact on human health

Social Determinants of Health

- Health is much more than a personal choice, there are additional factors that contribute to a person's current state of health

Session 1 notes cont.

Income and Health

- Economic hardship makes people more vulnerable to disease and to harmful biological effects of stress

How can Green Organizations Maximize the Potential for Doing Good?

- Support indigenous-led conservation initiatives
- Create job opportunities in Indian Country
- Create collaborations with opportunities for youth

Lia Rattler and Savanna Ollinger-Arellano were invited to come up and share their experience working with the Ksik Stakii Project in Blackfeet Nation. Alicia Yellow Owl with the Native Science Field Center at Blackfeet Community College was also introduced and recognized for her role in the project.

Session 2: Holistic Thinking About Landscapes and Health

Wednesday, September 25, 2019 at 9:45 AM

Graham Gaither, Land/Water Conservation Planner, Blackfeet Agriculture Resource Management Plan

Heather Harwood and **Kristy Augare**, Piikani Lodge Health Institute

Graham Gaither shared how the Blackfeet Agriculture Resource Management Plan (ARMP) takes a holistic approach to agriculture resource management, conservation, and food sovereignty. The Blackfeet Agriculture Resource Management Plan (ARMP) is a community-informed plan that will drive agriculture and natural resource policy within the Blackfeet Nation for the next ten-years. The plan seeks to invest in sustainable economic development through commercial agriculture, lower the health disparities of Blackfeet people through introduction of nutritious foods, and to invest in our most precious resource: our youth.

Holistic Management in Natural Resources

- Blackfeet Nation holds 55% of the region's biodiversity
- Blackfeet Conservation is value-focused

How We Plan?

- Working with large schools and universities to illustrate what indigenous-led research looks like – allowing other, smaller schools to follow
- Recognizing both traditional and modern land use

Implementing Our Vision

- Creating an ARMP framework for other tribes to follow
- Bringing local and traditional foods to the people through a local food delivery system and multi-species processing facility
- Expanding Indigenous planning of conservation areas, parks and resource management through a proposed Blackfeet Conservation Area

Session 2 notes cont.

Heather Harwood and Kristy Augare shared the work of the Piikani Lodge Health Institute, a Blackfeet 501(c)(3) that specializes in healing the bodies, minds and spirits of Blackfeet community members by reintroducing them to traditional cultural values tied to the land. The discussion brought together how they seek to reduce the health disparities that exist in Blackfeet Country by administering culture camps, leveraging community assistance resources, introducing positive coping skills amongst troubled youth and adults, and research traditional food consumption, all tying back to sustainable land tenure.

Background

- We as people have been given survival foods that aren't meant for us. There is a difference between survival food and Indigenous food
- What is the protocol for suicide in our community? Why are there no resources?
- Coping skills are lacking for our youth outside of school

How We Operate

- Grant-funded; community-led healing
- Working on growing, coding surveys and building data
- A healthy mind brings a healthy body

Culture Camps

- Helping people develop healthy coping mechanisms through our culture
- People left the camps wanting to know what is next for us; the schools are a good start
- Storytelling, teaching language, plant ID, native nutrition, and face painting are just a portion of the culture camps

Session 3: Reimagining Soil Conservation to Support Healthy Communities

Thursday, September 26, 2019 at 8:00 AM

Leah Webb, MPH, Author and Food Educator, Deep Rooted Wellness

Leah Webb shared how small communities represent unique opportunities for enhanced localized health and economic development. Deep Rooted Wellness is an educational platform for families interested in leading healthier lifestyles through positive food choices. By looking into the determinants of community health; soil, food, microbiome, and disease, Leah shared her knowledge on how ecologically diverse farming practices can lead to positive health benefits.

Current State of Health in the U.S.

- Elderly diseases are starting to develop in youth. A 3-yr. old in Texas was diagnosed with Type 2 Diabetes
- Diet has surpassed smoking as the #1 health risk in the country
- We are consuming diets that are high in sodium but low in whole grains, nuts and seeds, fruits, vegetables, fiber, legumes, omega-3 fatty acids from fish and other healthy protein sources

Commercial Farming

- A majority of the commercial farming in the US is not being used to feed people (instead used for ethanol, livestock feed, etc.)
- Methods for commercial farming include chemical fertilizers, pesticides and herbicides, bulk seed purchasing, and tillage
- Long-term consequences include decreased biodiversity, increased pressure from pests and disease, a loss of top-soil, and increased suicide rates for farmers

Does Better Soil Equate to Better Food?

- We don't know, but there is a decline in nutrition based on a lack of variety
- We are choosing to consume food that looks good and is easy to transport, which does not translate to nutritional value. Oranges have been found to have little to no Vit. C

Regenerative Agriculture

- 5 core principles: minimize soil disturbance, maximize crop diversity, keep the soil covered, maintain year-round living roots, and integrate livestock
- Animals and livestock can be very useful in the long run if used and pastured correctly
- Better for the environment with huge potential to sequester carbon
- Provides an opportunity for small communities through food security, diversification of crops, improved health, and economic development

Session 4: Holistic Health of Human and Natural Systems: Where do Land Trusts Fit In?

Thursday, September 26, 2019 at 9:15 AM

Moderator: Emily Harkness, Project Coordinator, Heart of the Rockies Initiative

Paul Travis, Executive Director, Flathead Land Trust

Richard Klafki, Canadian Rocky Mountains Program Director, Nature Conservancy Canada

Regan Plumb, Conservation Director, Kaniksu Land Trust

Emily Harkness moderated a discussion between Paul Travis, Richard Klafki, and Regan Plumb, to talk about their role with their respect land trusts both locally and on a larger, landscape-scale.

Individual Project Highlights:

Regan Plumb

- Pine Street Woods Project, offering 160 acres of forests and wide-open meadows just minutes from town and is the first community forest in Idaho
- The project aimed to help address public lands access within her community of Bonner County – more than half of the children and adults here don't or can't experience nature
- Pine Street Woods helps break down barriers that are keeping people from being outside

Paul Travis

- A 400-acre conservation easement, part of the West Valley Area Wetlands in Kalispell, which is prime bird and wetland habitat
- FWP, Audubon, and Flathead Land Trust worked with landowners to get a ¼ acre bird viewing area opened
- This area is the only known staging area for Sandhill Cranes in the Flathead Valley

Richard Klafki

- Nature Conservancy Canada tries to lead by example, knowing that landowners talk to other landowners
- Wings over the Rockies Event
- Lot 48 – part of a network of conservation lands and wildlife management areas. This area also has great spiritual significance for the Ktunaxa First Nation, whose stories celebrate the area as the site of their Creation. The property was the last remaining parcel that was not designated for conservation on the east side of Columbia Lake

Session 4 notes cont.

Additional Highlights:

Benefits to Private Easements/Access

- People think that an easement automatically means public access, but it doesn't, that is a decision that is up to the landowner
- Conservation easements protect from suburbanization, protect open space, wildlife, habitat and water
- Economic drivers, protecting working forest and farmland

Dealing with People who are Against Conservation

- Here to help landowners protect their land. That could just mean protecting land that is important to a family and represents their family, and in turn has additional environmental benefits
- Tax incentives
- Private landowners cannot get an official conservation easement without going through an organization

Breakout: Natural Resources

Session 1: Native Fish Keepers Inc.

Wednesday, September 25, 2019 at 8:30 AM

Barry Hansen, Fisheries Biologist, CSKT Natural Resources Department

Presentation exploring the role of corporations in conservation. The CSKT have close cultural ties to native fish and wildlife and have long relied on them for subsistence and spiritual needs. Non-native lake trout threaten tribal values by diminishing native trout abundance.

Introductions of fish to Flathead lake including Lake trout

- Mysis Shrimp introduction in 1968-1987 to lakes upstream of Flathead lake led to population explosion of Lake trout due to increased food source. This is an example of using misunderstood science to make a management decision and having it backfire (Can't improve on nature).
- Increased lake trout population led to decline in Bull trout population
- Other threats to Bull trout populations include the damming of the South fork by Hungry Horse Dam which blocked off spawning grounds of the South Fork

Lake Trout Problems in the West

- Successful management plans are in place in Yellowstone Lake and Lake Pend O'rielle

Flathead Lake Trout Management

- As managers it has been hard to adapt; the system has been changing so fast it was hard to write a management plan. In 2000 the Flathead Lake Co-management plan was finished. This plan states that native fish protection should be a priority
 - 1) The first step was the liberalization on Lake Trout Catch Regulations
 - 2) The next step made by the tribe was the beginning of fishing contests (Mack Days) which have been very successful
- There has been debate over the feasibility of eradicating Lake Trout to the point of collapse. The CSKT have taken the approach that this is not possible, and so they must plan for long-term maintenance of the Lake Trout population
- Goal is to maintain a 75% reduction in Lake Trout- The estimated degree of harvest needed for 75% reduction is 143,000 fish annually.
- Mack Days is one tool for this population management- 10 participants caught 14,096 fish in the last competition

Session 1 notes cont.

The creation of the Native Fish Keepers corporation

- Before the corporation was created, the CSKT processed all the fish caught during Mack Days and donated it to local foodbanks. (to date they have donated 80 tons of processed fish to local food banks)
- Eventually a limit was reached with catching, so some gill netting began- moving slowly to not shock the system.
- Spring and Fall gill netting now occurs in addition to spring and fall Mack Days
- Fish Processing Facility and Native Fish Keepers product label created to market the fish caught gill netting- the revenue from this helps to make the long-term lake trout mitigation efforts financially sustainable
- In 2015 the Native Fish Keepers incorporated under a tribal ordinance- now an official tribally owned business. Shareholders are the tribal council

Future Steps

- Fish smoking facility either as part of Native Fish Keepers or as a partnership with tribal entrepreneur
- Revisit Co-management plan

Session 2: Mushroom Madness

Wednesday, September 25, 2019 at 9:45 AM

Sara Alberts, District Timber Management Assistant, Three Rivers RD, Forest Service

Presentation will cover some of the biology of morel mushrooms, but more of the aspects of the challenges associated with managing for the influx of people interested in picking morels.

Managing commercial Morel harvesting after the 2017 fire season as a special forest product

- Lolo and Kootenai forests were the two in the region that agreed to take on commercial mushroom harvesting

Why Morels?

- Not cultivated; they rely on public lands for commercial picking
- Quite a lucrative crop: 1lb fresh=1.8 ounces dry=approximately \$25 per ounce
- A common day - pick could be 25-50lbs on a commercial permit
- Seasonal crop offers seasonal work opportunities

Types of Mushroom harvest allowed on Forest Service Lands

- 1) Incidental Use: up to 5 gallons with no permit and must be cut in half (cannot be sold)
- 2) Personal Use: Requires permit:
 - Free permit allows 5 gallons per day and 20 gallons total- must be cut in half
 - Fee personal permit allows 20-300 gallons in a season, also cut in half
- 3) Commercial Permit: Allows up to 750 Gallons in a season- Season was May 7-July 7 (instituting a season was an important management tool because it allowed them to keep track of when commercial folks were moving in and out)

Why go commercial?

- Helped to manage the resource better
- Allowed to set regulations such as where commercial groups could camp, this helped to disperse people

Management Concerns

- Sanitation concerns
- Violence and crime due to seasonal work force
- Impacts to grizzly bears
- Impacts to tribal uses
- Impacts to Forest Service employees

Session 2 notes cont.

Planning for Commercial Harvest

NEPA

- USFWS consultation on grizzly bear impacts
- Confederated Salish and Kootenai and Kootenai Tribe of Idaho consultation regarding treaty access concerns
- Public Scoping- recreational users (especially backcountry horsemen) concerned about impacts on their recreation

Implementation Planning

- Commercial mushroom areas
- Commercial camp locations
- Sanitation service locations and service signage
- Public Information
- Law enforcement- commercial program helped to get additional law enforcement assigned to area
- Multiagency coordination
- Translated regulatory materials to languages popularly spoken in seasonal worker populations

Things to ponder...

Forest service employees are hesitant to take on special use projects, how to get people to be willing to take on non-forest products programs?

Session 3: Climate Change Impacts in Montana

Thursday, September 26, 2019 at 8:00 AM

Bruce Maxwell, Co-Director & Professor, MT Institute on Ecosystems, MSU

This talk will cover current climate patterns and projections for Montana. Climate change impacts will focus on water, agriculture, and forestry.

Overview of MT Climate Change

- Temperature increasing since the 1950s
 - Winter: 5-7 degrees Fahrenheit change
 - Summer 6 to 7.5 degrees Fahrenheit change
- Seasonal change in the distribution of precipitation
- Seasonal drought
- 1990-2010 decreasing flow in the Missouri
- 2000- 2010 drier than the dustbowl in the Missouri watersheds
- Decreasing snow water equivalent
- Change from snow to rain earlier in spring
- Potential evapotranspiration increases- such as the flash drought in 2017-
Increased CO2 in the atmosphere leads to plants leafing out with more foliage, then continuing to pull more water from the soil which evaporates into the atmosphere

Stream flow projections

- Shift towards earlier snowmelt and shifts in timing of runoff
- Snowmelt dominated rivers in western and north central Montana- increase in flow 15-25 days earlier than average and then significant drop in flow

How does Agriculture contribute to climate change?

- Agriculture is 9 percent of total greenhouse gas emissions
- 17 percent increase in Ag emissions since 1990 from sources like Urea fertilizer which leads to acidification of the soil. Acidification of the soil is fixed often using lime which also contributes to emissions
- Cows in feedlots are also major contributor and beef consumption is on the rise worldwide

The Good News

Crops and forage sequester carbon from atmosphere

- Replace fallow with cover crops
- Replace livestock feed crops with protein crops for humans
- Increase or do not remove woody plants

Session 3 notes cont.

Warmer=Longer growing season (Maybe)

- More cover crop options

More Precipitation (Maybe)

- More cover crop options

Soil management improvements

- No-till reduces emissions

Fertilizer application improvements

- Precision ag to optimize fertilizer rates (minimize pollution while max farmers profits and resilience)

The Bad News

New crop options for MT=Corn and Soybeans

- Used for ethanol and animal feed which increase greenhouse gas emissions

Warmer=longer growing season

- Wheat Pollen viability decreased with more hot days

Increased demand for meat

- MT livestock can only withstand major heat when followed by cool nights and requires more water which increases producer costs and impacts waterways
- Need a breeding program focused on heat tolerance

MT Adaptation to Climate Change

- Montanans want adaptation strategies and services
- Services will come in form of public-private partnerships that facilitate taking adaptation actions that effectively combat impacts being felt and causing damage to local and state economies and to Montanans' unique and high-quality lifestyle
- Farmers and Ranchers in particular are experiencing shifts in weather patterns directly and the uncertainty is taking a toll

Session 4: Huckleberries and Pollinators
Thursday, September 26, 2019 at 9:15 AM

Janene Lichtenberg, Wildlife & Fisheries Dept. Head, Salish Kootenai College

Tabitha Graves, Research Ecologist, U.S. Geological Survey

Huckleberries hold importance to our past and present. They are also valuable to many wildlife species. Pollinators, especially bumble bees, share a mutualistic relationship with huckleberry plants.

Joint huckleberry study between Salish Kootenai College and USGS

- Huckleberry flowers are an important pollination source, but with climate change blossoming and fruiting of Huckleberries is shifting
- Seven varieties of huckleberries exist in Montana
- Long lived plants- significant food source for multiple species including bears
- Studying the temperature, humidity, and rainfall that lead to successful huckleberry growth

Huckleberries and Pollinators

- Hummingbirds and Bumble Bees are major pollinators. Because of the shape of huckleberry blossoms, bumble bees are ideal pollinators
- Study conducted through Salish and Kootenai College where plants were isolated from pollination using net bags and fruit production was measured
- Four study groups:
 - 1) open plants with no artificial pollination assistance
 - 2) open plants with artificial pollination assistance
 - 3) closed plants with no artificial pollination assistance
 - 4) closed plants with artificial pollination assistance
- Significant difference in plant productivity between those that were in net bags (closed) from those that were open to pollination by insects and birds. The plants that were artificially pollinated (by hand by the researchers) were somewhat more productive, but not as much as those that were pollinated naturally
- If blossoming happens later, could be detrimental to bumble bees who rely on huckleberry's early-season pollen to start the hive in the spring

Breakout: Connectivity

Session 1: Habitat Protection, Public Recreation Access, and Working Landscapes

Wednesday, September 25, 2019 at 8:30 AM

Jim Williams, Montana Fish, Wildlife, and Parks (FWP)

Kris Temple, Montana Fish, Wildlife, and Parks

Alan Wood, Montana Fish, Wildlife, and Parks

How FWP Approaches Land Conservation – This talk will delve into the creative tactics FWP has employed to accomplish landscape-scale habitat protection while providing public recreation access and maintaining compatible working landscapes with an eye towards future possibilities.

Jim Williams

- Working on data-driven habitat conservation
- Renewed consideration of working lands and outdoor recreation

Alan Wood

- Hydropower mitigation
- Working with USFS Forest Legacy Program
 - Conserving working forests
- Around Flathead, livestock is down, agriculture is down, timber is down, but population and houses are UP
 - Conservation easements as a tool for connectivity
- FWP and partners seek a variety of funding sources: collaboration is KEY

Kris Temple

- Case study to demonstrate how collaboration, relationships, patience, and perseverance are important for conservation success
- In NW Montana, politicians are conservative. (ie. elk hunters). Conservation protects their hunting grounds—conservationists and politicians can find common ground, bridging ideological differences.

Session 2: Roads and Wildlife

Wednesday, September 25, 2019 at 9:45 AM

Moderator: Len Broberg, Professor, Environmental Studies Program, University of Montana

Dale Becker, Tribal Wildlife Program Manager, Confederated Salish and Kootenai Tribes

Melly Reuling, Deputy Director, Center for Large Landscape Conservation

Dawn LaFleur, Restoration Biologist, Glacier National Park

Dale Becker

- US Highway 93 was once the most dangerous road in Montana – wildlife vehicle collision (WVC)
 - Dangerous for humans, but also destructive of animal populations and connectivity
- Mitigation project was collaboration between CSKT and MDOT, Western Transportation Institute consulted
 - Site selection to identify hot spots for animal crossing – pre-monitoring
 - Locating of underpasses, overpass—construction
 - Fencing is KEY to structures' success!
- Post-monitoring: camera surveys, track bed surveys
- Evaluating success: mitigated stretches of highway saw a 71% decrease in WVC; unmitigated parts had a 91% increase in WVC

Melly Reuling (*presenting for Cassie Powell*)

- Blackfeet Nation Animal Vehicle Collision Master Data Plan
 - Crashes
 - Connectivity
 - Conservation
 - Culture
- Data collection using the ROADS mobile phone app along with public meetings
- Identification of priority road sections
- Cost benefit analysis – cost of collisions far outweighs the cost of mitigation

Dawn LaFleur

- Terrestrial Invasive Connectivity – fragmentation affects the resilience of non-native invasive plants

Session 2 notes cont.

- Roads are the primary vectors for dispersal of non-native invasives – opportunism
 - Spotted knapweed – 30,000 seeds/individual; allelopathic- kills surrounding plants
 - Houndstongue – hitchhiker
 - Leafy spurge – huge root system
 - Orange hawkweed
 - Oxeye daisy
- Human induced disturbance
 - Roads
 - Trails
 - Horse trails, etc.
- Natural disturbance
 - Fire
 - Flood
 - Landslide, etc.

Session 3: Preserving Connections on Private Lands

Thursday, September 26, 2019 at 8:00 AM

Moderator: Len Broberg, Professor, Environmental Studies Program, University of Montana

Paul Jones, Wildlife Biologist, Alberta Conservation Association

John Steuber, State Director/Supervisory Wildlife Biologist, USDA APHIS Wildlife Services

Gary Burnett, Executive Director, Heart of the Rockies Initiative

Paul Jones

- 14% of mule deer fatalities caused by fencing
- Fencing can disrupt predator-prey dynamics, nutrient cycling, and ecological connectivity
- However, fences are important for landowners for marking property and managing livestock
- The only wildlife friendly fencing is no fencing
- However, there are ways to build wildlife-friendly fencing through fence modifications
 - Smooth bottom and top wires
 - Clips between strands to allow space for crossing
 - “Goat bar” – PVC tube that covers a section of barbed strand
- Recommendations
 - Bottom wire at 18 inches minimum height
 - Top wire at 40-42 inches maximum
 - Smooth wire bottom strand or use clips
 - Increase fence visibility

John Steuber

- USDA Wildlife Service’s collaboration with NRDC and Defenders of Wildlife to prevent grizzly and wolf depredation of livestock
- Partnerships increase capacity for ambitious projects
- Turbo Fladry fencing
 - Visual deterrent – neon flagging
 - Physical deterrent – electrified wire
 - Very effective for wolves, not so much for bobcats and mountain lions
 - Must be taken down after 60-90 days to prevent habituation and decreased effectiveness
 - Best for small areas – ie. calving pasture
- Range riders
 - Identify carcasses for compensation programs
 - Monitor large carnivore location

Session 3 notes cont.

Gary Burnett

- High Divide Collaborative – conflict resolution for connectivity
- As grizzly bear range expands, increased potential for conflict with landowners
- Future goals include:
 - Expanded carcass pick-up programs
 - Expanded composting sites
 - Long-term program assistance and funding