

Revelstoke Caribou Rearing in the Wild
Final Report:
Social Structure and Function

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Table of Contents

Executive Summary	2
Introduction	5
Methods	5
Findings	6
Results.....	6
Motivations for Involvement	7
Rewards of Involvement	9
Structure and Function	12
Improvements for Regular Communications	15
Overall Impression of Project.....	16
Results from Interviews with Contributors	17
Results from Lichen Volunteer Survey	20
Recommendations	23
Key for Multi-stakeholder Projects.....	23
Internal and External Communications.....	23
Human Dynamics.....	24
Funding and Contributors.....	24
Maternity Pen Operations	25
Critical Periods.....	25
Lichen Picking.....	26
Diverse Stakeholder Buy-in.....	26
Conclusion	27
References	28
Appendices	29
Interview Questions for Board Members, Contactors and others	29
Interview Questions for Contributors and Funders.....	31
Survey Questions for Lichen Picking Volunteers	32

EXECUTIVE SUMMARY

The Revelstoke Caribou Rearing in the Wild Social Report provides a summary of the social dynamics of the multi-stakeholder five-year pilot project. The purpose of the report is to compile the personal perspectives of those involved in the project in order to reflect, learn and apply ideas to future projects. Some of the recommendations can also be applied to other multi-stakeholder projects.

Methods included in person interviews and phone interviews with those who were very involved in the project. Twenty-four of the thirty-four approached completed an interview. Contributors and funders were also interviewed, with half of the eight approached participating in the interview process. Those who volunteered as lichen pickers completed an online survey, with 35 people out of 130 that were emailed the link, completing the survey. All results from the interviews and surveys are reported on in a way which aims to maintain anonymity. Findings were broad and varied from all three groups, and are included in the longer report below.

Recommendations

Scope

Multi-stakeholder projects need to consider keeping a very narrow scope in order to ensure that everyone will stay at the table. If the discussions or deliverables broaden, then there is a high likelihood that organizations will run into conflicts.

Internal and External Communications

Create a clear communication plan that outlines the level of transparency the group is comfortable with for both internal and external communications. Ensure that confidentiality and transparency guidelines are written into contracts. Be sure to define clearly in each contract who owns intellectual property in terms of reference.

Employ a robust and up to date internal communication system that is accessible to all and ensures that people can access pertinent information without being overloaded with unnecessary communications. This could include an internal digital group chat running so that things can be discussed right away, everyone can stay informed and have their voice heard. For more general internal updates, circulate a weekly newsletter consolidated by the secretary and contributed to by each lead. This newsletter could also be circulated to an “outer ring” such as funders, on a regular basis. First Nations can offer unique perspectives on effective

communication methods and space should be made to explore options. The First Nations blessing ceremony can enrich relationships within the group and to the land.

Consider how much information is shared with media and public and determine if certain information will be filtered out if it does not serve the primary goals of the project. Ensure that this decision is made with consideration for what the public is expecting and wanting in order to gain public support. The multi-stakeholder approach in editing and fine-tuning communication products is important because each stakeholder can offer perspective on how their audience will receive it. Consider adopting moment to moment unfiltered transparency on the website and with the media, because people seem to gain a sense of things regardless. Aim to have a consistent communications person to ensure that communications are always up to date, especially through critical periods.

Human Dynamics

Consider how to manage personality with structure in terms of how you can use structure and systems to avoid conflict where possible. Strong personalities are often good at getting things done, but can also contribute to headaches and frustration. Keep in mind that strong personalities can be present in both men and women, and in younger and older people. Balance of all types at the table is helpful to success. Be conscious of your own personal biases when working with others and try not to let them cloud the information coming from another team member, whether they relate to age, gender, or level of education.

People who are coming to the table have the responsibility to speak their truth. Quiet people have to do self-work; it is up to the group to make them feel safe, but there is a responsibility on their part to speak up.

Success of the group relies on healthy egos, accepting other's opinions, staying focused within scope of project and accepting compromises. People come from different work cultures - academics are used to defending their thoughts, but some people are not used to that culture.

One recommendation that was repeatedly expressed was to expect friction in a situation where we have a steep learning curve and many people involved.

Funding and Contributors

Building a reputation and securing more funding will lighten the load on people over time.

Trust that as the net widens, the load will be more spread out over many hands and will reduce burn-out. Government employees should be non-voting members on board or not be on board if

that branch of government is contributing funds or time because it can be a perceived conflict of interest.

Diverse Stakeholder buy-in

Some stakeholders had stronger engagement than others. There is a lot to learn from the organizations that were less involved with the project, because they may not have a strong understanding of the project and as a result, they may have less buy-in.

Provide an orientation for new board members that includes a history of the organization, goals, and funding. If you ask a group to be represented at the board table, it is critical that they feel that they have a voice at the table and that their opinion is valued.

Ensure each new board member has the opportunity to sit down with someone to learn more about the project and have a full understanding of how it works, and what role each board member is playing. Provide a comfortable space away from the larger group and encourage them to ask tough questions, voice concerns and have a critical eye.

In order to prevent concerns that may build from the discrepancy between paid and volunteer positions on the board, clarify who is being paid to sit at the board meetings, and by whom, and potentially offer non-paid members a stipend for attending meetings. Further to that end, ensure that non-paid board members, who may be taking time off of work to attend meetings, are given preference with regard to scheduling meeting times.

In order to ensure that every board member and stakeholder group feels useful, engage each member in their area of expertise with respect to their contributions to the project.

Additional Recommendations

There are three additional recommendations sections relating specifically to this project that can be found in the Conclusions and Recommendations near the end of the report. These sections include: *Maternity Pen Operations*, *Critical Periods* and *Lichen Picking*.

INTRODUCTION

The Revelstoke Caribou Rearing in the Wild (RCRW) Social Report is an exploration of the social workings of the Revelstoke Caribou Rearing in the Wild Society. It seeks to define the background, connections, motivations, structure and function of the society prior to and throughout the five year pilot project.

This report sets out to provide a good understanding of the fundamental aspects that allowed this multi-stakeholder group to collaborate and thrive, as well as challenges that arose, and how some of those challenges were addressed. It explores the personal perspectives of those involved, including board members, contractors, volunteers and funders with goals of reflecting, learning and applying ideas to future projects. It also suggests some general practices that may be helpful if applied to other complex projects that have a diverse group of stakeholders.

The research and reporting describes generalized experiences, and does not identify individuals.

METHODS

A contractor was hired to collect information from those involved in the Revelstoke Caribou Rearing in the Wild and to compile findings into a report.

A list was compiled by members of the board of directors to identify everyone who was involved in the project from the inception of the idea in 2012, to the end of operations in the spring of 2019. This included a timeline, as well as a ranking of level of involvement.

Data collection involved personal interviews, phone interviews, and a survey. A 20 question interview was developed in consultation with the board for those most closely involved with the project. These interviews were delivered mainly in person. A 12 question interview was developed to conduct with funders over the phone. A nine question, two minute survey was delivered using Survey Monkey and completed by volunteers who helped collect lichen.

Interview results were printed off, read through, and marked up twice to categorize, code, and identify themes in the data.

Participants were assured that their thoughts, perspectives and opinions would remain anonymous throughout the collection, review and reporting process. During the analysis, pertinent information was integrated, while omitting key identifying characteristics of

interviewees. Anonymity was provided so that interviewees could speak freely, knowing that their perspective would not be directly linked to them, their organization or their business.

Towards the end of the editing process, additional input was included from a smaller group of those interviewed to expand information about the First Nations blessing ceremonies including a description and some personal impressions.

FINDINGS

Interview and Survey Response Rate

Thirty-four people who had been closely involved in the project were asked to participate in a research interview. Of those, twenty-four people participated in an in-person or phone interview between May and July 2019. Generally speaking, the people who chose not to participate in an interview were either involved in the very early days of the RCRW Society, were very busy with their field season, or were indigenous people who had been involved in the project as shepherds and had moved on to other work.

Four interviews were conducted with key funders, out of eight that were approached.

A survey was sent via email to 130 individuals who participated in lichen picking; it was completed by 35 people.

RESULTS

Interviews with Individuals Closely Involved in the Project

Professional and Related Backgrounds

There was a broad level of expertise among those involved in the project. Many were involved in research, monitoring and land management had post-secondary education and certification. The education of this group included two Bachelor of Arts, five Bachelor of Science, four Masters in Biology and a PhD in Wildlife Biology. Two veterinarians also participated in the interviews. Five of those interviewed had related technical diplomas that they obtained two to three decades ago and had been working in the field ever since. Of this group, two were certified as Registered Professional Foresters and two were certified as Registered Professional Biologists. Several of those interviewed worked for federal and provincial government and

several others work independently as wildlife consultants. Five of those involved were either on the board or worked at the pen and had less formal education, but strong skill sets related to their position. Of those who were not specialists in wildlife biology, one board member had a PhD in environmental philosophy and ecopsychology and another board member worked as a lawyer. Collectively, this group held more than 260 years' experience in their respective specialties.

Interviewees were involved with the project for two to eight years. A core group of those interviewed were heavily involved in the project from inception to the end of the five-year pilot.

Motivations for Involvement

Professional and Personal Motivations for Involvement

The motivations for being involved in the project varied but there were some key themes. Even though people were asked to distinguish between personal and professional motivations, for many, these areas overlap and are one in the same.

Professional motivations included, interest in conservation, testing options for caribou recovery, and helping an endangered species. Interviewees expressed that this project provided the opportunity to stop talking and start doing, to stop blaming and to shift the pendulum towards cooperation and action after forty years of population decline. One interviewee stated, "This species at risk is iconic and they are the canary in the coal mine for environmental change in that they protect a lot of other old growth dependent species that are not as sexy."

The work was also appealing to some because of the enjoyment they experience in carrying out fieldwork and complex investigations into collars that indicate mortality signals. Some were assigned the project through their work and others chose to participate, but in both cases many people brought strong related skills and a keen interest in the project goals.

"A chance to shift the pendulum after forty years of population decline"

There was also a sense of pride and ethical duty being part of the project, that it was simply another lesson from kindergarten to "clean up your own mess". One person stated that they wanted to show their children how to look after something that is important to them and to show them that you can make a change. Another stated that they were raised to speak for those who cannot speak for themselves.

"I was raised to speak for those who can't speak for themselves"

The team itself was also appealing to some, in that they looked forward to working with others who were involved in the project. Others were drawn to the challenges of working with so many

different people and learning from them. One stated that they felt that they could accomplish a lot more working together than they could in isolation in their job.

Professional Relationship to Caribou

Many people on the board, as well as partners and contractors had strong professional knowledge and skills related to caribou.

Many of those interviewed had at least a decade of intensive experience with at least some of the following: telemetry, mortality investigations, moose surveys, caribou captures, collaring, pellet surveys, processing samples, chemical immobilization, translocation, health assessments, aerial census, data analysis and reporting.

Others on the project team had land and habitat management experience related to forestry or government. One who had been a forester for several decades described managing forests with caribou in mind knowing that it would take many decades before it would grow to be suitable habitat. One had worked in the oil and gas sector to make landscape changes that would reduce predator access to caribou.

“I remember managing forests with caribou in mind, knowing that it would take decades before it would grow to be suitable habitat.”

Some approached land management for caribou by managing human recreation, establishing and maintaining area closures. Others had roles in enforcement or education, ensuring recreationalists did not enter caribou closures.

A few had encountered caribou regularly during their work in northern Canada and Alaska, but had not worked directly with them. One had worked as a caribou hunting guide in the north.

Two people that frequently work in the backcountry stated that they have witnessed the decline of caribou in alpine meadows over the past few decades in the region north of Revelstoke.

Personal Relationship to Caribou

Few interviewees had experienced interactions with caribou in their personal lives. The most common location for sightings was on the highway north of Revelstoke. Several people had seen caribou while ski touring including sightings of six and fifteen at Blanket Glacier, and one in Salmo-Creston Pass.

For two people, their association with caribou was linked to their grandparents. One person said that they saw a caribou when they were 5 years old, and that they used to hunt them many decades ago with their grandparents. Another person recounted that their grandpa had seen a

hundred caribou in Salmo-Creston Pass, while they themselves had seen eight caribou there as a child, and now that group has dwindled to none.

“My grandpa talked about seeing a hundred caribou in Salmo-Creston Pass, and when I was little I saw eight there, and now they have dwindled to none.”

For some, their personal interactions with caribou were limited to more obscure interactions. In one case, this involved a disheartening viewing at Marineland, while in the other case; their personal interactions with caribou were limited to tasting caribou meat while in the north.

Some people described their personal relationship to caribou in terms that are more theoretical. They stated that it was a depressing time for caribou and that they feel for the furry charismatic animal. Many people shared their fascination with the animals with expressions like “really gentle creatures, shyness and avoidance, small, fleeting, so resilient - and yet so sensitive, really amazing animals in a niche environment, mountain dwelling deep snow environment animals, iconic species on our quarter, and ghosts of the forest.” One person stated that they have a personal fascination with caribou because “they are a result of the post glacial environment and can tolerate eating lichen and being in a starving state through most of the winter while pregnant. So tough, yet so sensitive.”

Another stated that they value forests as much as caribou because forests sink carbon and that in protecting large areas of forest for caribou, we are able to sink hundreds of thousands of tons of carbon. They went on to say that these old growth forests house species that we many not yet even know exist.

Social Capital

Relationships appeared to be a key to the success of the project. Many of those interviewed stated that they had worked closely with at least a few of the others involved in the project. Many had either personal or professional relationships with several of those involved. Occasionally, someone would state that they did not know anyone involved in the project prior to joining, or that they only knew one or two people. However, most participants had a high degree of familiarity or friendship with many in the group prior to becoming involved. This social capital appeared to be a key to people choosing to be involved with the project.

Rewards of Involvement

Interviewees consistently expressed that they had gained a lot of knowledge and learned a lot about caribou biology. This included gaining knowledge about this specific herd that will help

with planning and management, as well as gaining a better understanding of the “levers” at play. It is evident that the project advanced people’s understanding of the protocols and site characteristics required for maternity penning. Others spoke of learning a lot about wildlife health from the veterinarians, as well as gaining experience and skills from them. A side benefit of having the pen in place, that was mentioned by one of the interviewees, was that it allowed testing of the soft release with animals from a different population in late-fall 2018, which proved

to have better results than direct translocations which had been implemented in the past.

“The benefits will not be entirely clear for a number of years as the benefits go beyond caribou numbers, and that this collaboration will likely benefit caribou down the road.”

People made statements about coming out of the project wiser, about the need to “write the book as they went” (with such a unique project, there were few direct resources to draw from) and about being honoured and blessed to handle caribou. Many agreed that the benefits will not be entirely clear for a number of years as the benefits go beyond caribou numbers, and that this collaboration

will likely benefit caribou down the road.

Another reward that many people identified was the sense of community they derived from the project, the new and strengthened working relationships and friendships, and the benefits of working with a diverse group of people. They identified that the sum is bigger than the collection of its parts, and that there were large social benefits from learning how you can bring people with different values together. Many also spoke of how hard everyone worked on the project. People spoke of learning from each other, of learning patience, of improved communications skills when dealing with varying viewpoints, and of gaining satisfaction from being part of a group that comes together to solve a problem. They learned a lot about board governance, about the social aspect of ecology, about cultural considerations, and about developing trust with diverse groups in the community.

Rewards through First Nations Involvement

Many people interviewed said that one of the main rewards was developing a relationship with Splatsin and learning more about First Nations. Statements were made such as:

- “Splatsin are a key part of what I found really interesting.”
- “I got a lot out of learning much more about First Nations connection and spirituality.”

- “I enjoyed working with first nations in an immersive way and I appreciate their perspective in the day to day and the human aspect”
- “I value how they look at things and come at wildlife interactions from a different place than government.”

Splatsin delivered First Nations blessing ceremonies at the maternity pen in 2014 and again in 2017. These were delivered by Kupki7 and attended by the chief and council. The blessings really stood out for people as a special part of their involvement in the project, and their reflections are below:

- “It was very moving watching First Nations prayer at pen.”
- “I was present at the first blessing. It was something I’ll never forget. I felt it really set the pen onto the right course so I was excited to have them back in year 4. The connection that the elders and Splatsin youth had to our surroundings was clearly evident. I was really honoured and moved to be part of that smudge ceremony. In hindsight we likely should have done one every year.”

This description of the First Nations blessing ceremony was shared by Lawrence (Randy) Williams:

This is a short piece of the ceremony that was done with the sacred pipe in the circle up at the caribou pens the first time, at the establishment of the pen.

“The ceremony is a giving thanks and prayer for the Caribou’s engagement for survival. The ceremony calls the creator and helpers of the four directions, mother earth, grandmother moon; for each has a purpose and a job given to them by the creator. The giving thanks is for all the caribou did for our people since the beginning of time, by giving the most one can give, their life, so we could live through the hard winters. This comes from our laws that teach us how to be human beings from the creator. All races of people had these laws back in tribes time, laws that teach us. And one responsibility to speak for those who cannot speak for themselves: air, water, trees, fish, four legged fur bearers, children and unborn. When remembering the caribou, I remember what my old people said, how the herds were so large it took almost an hour for them to travel through up the valleys up at hunters range. They were a winter food source for the tribes, as well as others. The ceremony prayers are to awaken people to remember their responsibility to creation, and the future generations, asking the creator to watch over the caribou.”

“I was present at the first blessing. It was something I’ll never forget. I felt it really set the pen onto the right course.”

RCRW would like to offer thanks to Splatsin for setting the project on the right path. It was truly appreciated. Through the process of reflecting on the blessing ceremonies, there evolved a desire to conduct a closing ceremony for the project, which will likely occur after the winter during which this report was completed.

Structure and Function

Stepping Away

In general, once people were involved, they did not consider stepping away from the project unless other personal or professional factors got in the way.

Most people down-played their expertise and said that if they had left, someone else would have filled their position. They did, however, identify that continuity would have been lost.

“If any of the key players had stepped down in the early days, it wouldn’t have proceeded.”

Some key attributes that may have been lost if certain people had stepped away from the project were: being a sounding board and a level head when emotions ran high, peace-making, making things happen, securing funding, expertise, a willingness to be on 24 hour call, keeping people focused and enforcing board governance. One person who had been involved from the very beginning stated, “If any of the key players had stepped down in the early days, it wouldn’t have proceeded.”

Reporting Structure

The reporting structure evolved as the project morphed from an idea, to a group, to a society, and then to a registered society with an operational team. The summary below is based on interviewees responses, rather than an all-encompassing description of reporting structure.

At the start, there was less structure and more informal frequent meetings at coffee shops and even on the gondola. As the society became more refined, clear job descriptions were developed. At that point, the executive director reported to the board and most contractors reported either to the executive director or to a board member that was the lead of a sub-committee. Subcommittees included: science, communications and operations. The executive director organized people in their roles and stayed on top of communications and follow-up.

In general, board members did not have direct involvement with operations and protocols at the maternity pen itself. There was a pen manager that managed shepherds and worked with

veterinarians. Both Splitsin and Okanagan First Nations were employed as shepherds. Splitsin also employed two other biologists who provided input and field monitoring.

The Revelstoke Community Forest Corporation managed the financial records, which was critical to the success of managing multiple funders and complex expenses over a long period.

Initially, both provincial and federal government was represented on the board of directors, but as both bodies were contributing funding to the project, there was potential for perceived conflict of interest and they both stepped away from voting positions on the board.

Function of Organizational Structure

There was a mix of responses from people in relation to the effectiveness of the reporting structure. Some stated that they clearly knew who to report to. Others stated that it was not clear who to report to, how to report or that they did not feel included as much as they would have liked.

Function of Executive Directors

The role of the executive director was described as critical for staying organized, assigning roles, and carrying out communications and follow-up. One person said that the executive director was not really attached to their opinion and that made things run more smoothly; that they were a neutral personality with less specific expertise but a good working knowledge. Several people stated that they didn't know how the project would have made it without the executive directors, and that they took their hats off to both of the main executive directors.

Function of Tracking Finances

It was clear from interviewing those involved in fundraising, that having Revelstoke Community Forest Corporation (RCFC) taking care of the financial records was critical in order to manage multiple funding sources with different purposes. In one of the early capture years, RCFC floated the society through the fiscal year end, when capture was happening and funding was unavailable until the next fiscal year.

Function of Governance

By all accounts, once a proper governance structure was adopted with goals and measures, vetting procedures, voting procedures, process, and assessing performance, it made people accountable and was more efficient. In the early days, some stated that there was a lot of ego and

“Going into any structure, you need to roll with the punches and know that it is a growing breathing beast”

energy wasted on vying for power. Another stated that going into any structure, you need to “roll with the punches” and know that it is “a growing, breathing beast.” In general, everyone carried their weight and did not drag things backwards. The organizational structure worked, in part, because certain personalities, such as “even-keel” or “driven to get things done,” were in place and if those people had disappeared, it may not have worked. One challenge that was identified was that some people were doing too many jobs at once, which made it difficult to maintain a defined structure and hierarchy. Another referred to the same issue, in that delegation of operational tasks would have helped prevent burnout. It was evident that the core people on the board became comfortable with the structure. However, some people that were new to the board did not have a clear idea of their role, what they could speak to or what they could contribute. As well, some were confused about the role of subcommittees on a small board and thought that it added to the confusion. In general, everyone felt engaged in the organization, however one group in particular felt that they offered their input and services and would have liked to have been invited to be more involved in terms of their input and skills.

Function in Relation to Maternity Pen

Overall, those working at the maternity pen really enjoyed the experience of working with each other, with caribou and in an outdoor setting. However, the remoteness of the pen created challenges as well. The comments shared below span portions of time and are not representative of the entire five year period.

Some people working at the pen felt like they did not have input in protocol development and felt like they had knowledge to contribute. Sometimes shepherds felt like procedures and equipment were not shared with them. Others, not working at the pen in the day to day, felt like shepherds were not abiding by protocols. One shepherd commented that a flatter organizational structure

“A flatter organizational structure would have allowed for more collaboration from people at the pen.”

would have allowed for more collaboration from people at the pen. Another identified that shepherds were not included on calls, even though they were the ones spending the most time with the animals - which sometimes seemed to contribute to frustration. One shepherd commented that requests from the pen were questioned by those in town.

Those working at the pen consistently expressed concern over being able to relay needs and requests for supplies to those in town, especially during weekends and when people were away on vacation.

Shepherds and veterinarians at the pen identified the need for a more effective method of communication while caribou were in the pen during the calving period. Daily records were kept, but the frequency of relaying that information varied significantly and it was not always relayed

in the same manner. One suggestion was that perhaps knowledge and a different approach could have been developed by asking First Nations about observation methods that may have fallen more closely in line with traditional methods, and that these could have been incorporated to compliment or replace the data collection and relaying of information via computer.

Improvements for Regular Communications

Regular Internal Communications

Internal communications improved over time, but gaps still existed even towards the end of the project. The complexity of information sharing via email appears to have been somewhat ad hoc and to have been a source of confusion and frustration. Some stated that they were not included when they would have liked to have input, and that it “got their nose out of joint”. Others stated sometimes messages did not get to the right people at the right time, or that they did not know if they were required to respond to an email that they received. And people preferred that Reply All was not used unless it was important that everyone hear the responses.

The dissemination of information during calving period and from the herd once caribou were released did not appear to satisfy everyone. People have different levels of interest and needs in terms of how often they get updated.

One person suggested that there was no clear channel through which to voice concerns.

It was also stated that they needed a clearer idea of who owned the intellectual property within the terms and conditions of contracts.

Regular External Communications

It was expressed that some felt constrained or muzzled in terms of communicating clearly with the media, depending on if the information served or didn't serve the organization's overarching goals. It was stated that if you are not saying much then it appears that you are hiding something, and that transparency was important especially during critical periods. Ideally, they would have preferred to be completely transparent and have a communications person continually updating website and media. Fact sheets were identified as beneficial for both internal and external communications but did not address the more frequent need for updates.

Improvements for Communications During Critical Times

The Incident Command structure was adopted for several different scenarios including capture, predator intrusion and mortalities. A thorough debrief was conducted in 2018 after a series of pen mortalities and the summary is included in the technical reports section. Overall, it was clear that roles, responsibilities and decision making hierarchy needed to be clearly mapped out

prior to any critical period. It was also critical to ensure that a board member was present during any decision or call during a critical period and that sidebar conversations be avoided. A lack of structure significantly increased frustration, stress and conflict during critical periods when emotions could be running high. People were unkind during times of horrible stress.

“Shepherds’ calm personalities were an asset when there was a crisis at the pen. They were steady and calm under stress, even though it was really hard for them.”

It was also important to attempt to clearly define terms prior to critical periods. For example, it is important that everyone be on the same page with respect to defining “imminent danger” with respect to predators before making decisions relating to predator proximity.

One other challenge that was identified was that people were sometimes on holidays

towards the end of the calving period and during the release period and it was not always clear who was acting in their place.

There was a huge burden for those in roles of responsibility and those on the ground when things went wrong and there was a heavy emotional drain when there were calves in the pen. There were feelings of helplessness when mortalities occurred during calving. It still bothers some of the shepherds to think about caribou deaths in the pen, because they loved working with them. One comment that stood out was that “Shepherd’s calm personalities were an asset when there was a crisis at the pen. They were steady and calm under stress, even though it was really hard for them.”

Overall Impression of Project

Towards the end of each interview, people were asked the following question, “Do you feel that the RCRW was successful in terms of carrying out a five year multi-stakeholder collaborative pilot project?” Two answers out of 34 that were not strongly positive. One person responded “I guess yes. From my perspective.” Another person responded “No, hard no.” The rest of the answers were resoundingly positive and frequently included the words yes, absolutely and definitely.

“100%. A remarkable bunch of people that did some remarkable things with the tools they had. It started out at a table and became reality.”

Some additional positive comments included remarks about the multi-stakeholder component, learning, passion, caring, countless volunteer hours, solid people, diverse motivations, and being a big undertaking with lots of people.

There were a couple of comments regarding the feasibility of the project in relation to timing. One person wondered if the project would have worked five years from now, as land use issues in relation to caribou are becoming more tenuous. There are fewer caribou, more pressures, and bigger consequences for stakeholders. Another person identified that the elephant in the room was jobs, and that the maternity pen was accepted by all parties because it had a potential positive effect with no risk to people's livelihoods.

RESULTS FROM INTERVIEWS WITH CONTRIBUTORS

The contributing organizations that participated in the interview process have been established for 20, 25, 35 and 75 years.

For three of the four contributors interviewed, financial support for Revelstoke Caribou Rearing in the Wild was obtained through a formal application process. The fourth major contributor that was interviewed, the Revelstoke Community Forest Corporation, also provided extensive in kind support through staff time both for project planning and financial tracking prior to becoming a society and throughout the pilot project. It is worth noting that a multitude of in-kind contributions were made by many other government bodies, businesses and organisations. These contributions are summarized in Section 2.2 and 2.3 of the Final Project Report.

Objectives of Funding Organizations

By supporting Revelstoke Caribou Rearing in the Wild, funding organizations were able to meet their own goals. These goals are listed below:

- Increasing conservation outcomes for wildlife and their habitat
- Public and school group involvement through the stewardship component
- Work towards recovery of federally listed species at risk
- Increasing profile of species at risk
- Sustainable forestry initiative - furthering research and conservation
- Set a high standard in industry for environmental stewardship
- Improve economic, social and environmental well-being of communities in the basin

Notable Attributes of RCRW

Funders were asked to identify anything that set this project apart from others that they have funded. Responses focused on a few key areas including complexity, partnerships, and community involvement.

Caribou are an iconic species at risk, and this is what helped the project get noticed initially by some funders. Maternal penning was noted to be a much higher level of intervention, and the project itself was bigger, more complex and higher profile than many of the projects that funders are usually involved with. The high profile of the project served to raise understanding of caribou at a national level.

“The high profile of the project served to raise understanding of caribou at the national level”

The partnership was also described as dynamic, in that it combined industry, several levels of government, First Nations, private business and a guide outfitter. This allowed the project to leverage funding from multiple sources. It allowed government to work at a different level, with greater cooperation and understanding. It appeared that everybody had the same focus, and nobody put

their other desires ahead of the partnership. Another notable aspect of the partnership was the long-term benefit of the training provided to First Nations shepherds.

Community involvement was another noted aspect of the project. The community provided support and direct involvement in lichen picking, as well as keenly learning about species at risk.

Communications with Funders

Funders were generally satisfied with the required level of communication from RCRW and stated that requirements were met through grant reports. The society was responsive to requests for information and was proactive when shifting money from one place to another.

In terms of less formal communications, all funders stated that they would have appreciated more regular email briefings and more frequent posts on social media because factsheets didn't provide frequent enough updates.

Success of Project

One funder stated that simply getting this project off the ground as a community effort was a huge success. Another funder stated that it was a massively complex project to take on, and that it was a success getting all those disparate groups together in a room for one particular

project. One funder was unable to identify successes that stand out until they read the final science report.

Concerns about the Project

One funder stated that any concerns about the project were identified and flagged in the initial funding application and that these were addressed prior to approval. In the early stages, one contributor was concerned about animal care, but the funder was confident in the people involved and their level of expertise. Two funders identified that their main concern was maintaining the strength of the partnerships throughout the project, and they were confident that the society would be able to accomplish this.

Gains by Funders

One funder identified that they have gained really good scientific information that will help government colleagues decide what to do next with caribou recovery.

Revelstoke Community Forest Corporation identified that they have raised their profile in the community and the community now knows that they are concerned with the environment, even though they are focused on forestry. The knowledge gained also helps in formulating management strategies and herd planning going forward.

Withdrawal of Contributions

None of the organizations considered removing their contributions at any point. The main implication if Revelstoke Community Forest Corporation removed funding would have been the loss of in-kind staff time, which likely would have affected the process of building the maternity pen and tracking society finances. Another funder identified that they do not usually enter into multi-year agreements, but they were able to see the benefit of doing so in this case.

Benefits of Project

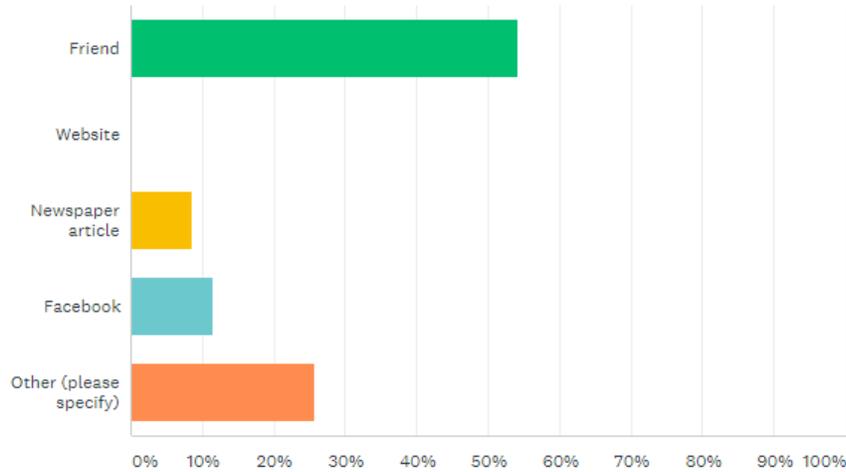
Some of the benefits of this project listed by contributors are as follows:

- This project fits the model that we are wanting to see more and more in that it was a multi-stakeholder project involving First Nations, and that there was funding provided through different partnerships
- It was successful in starting public conversations about caribou and species at risk
- A solid founding team helped build assurance that it would go well
- Adaptive management approach

RESULTS FROM LICHEN VOLUNTEER SURVEY

How did you hear about the lichen picking volunteer opportunity?

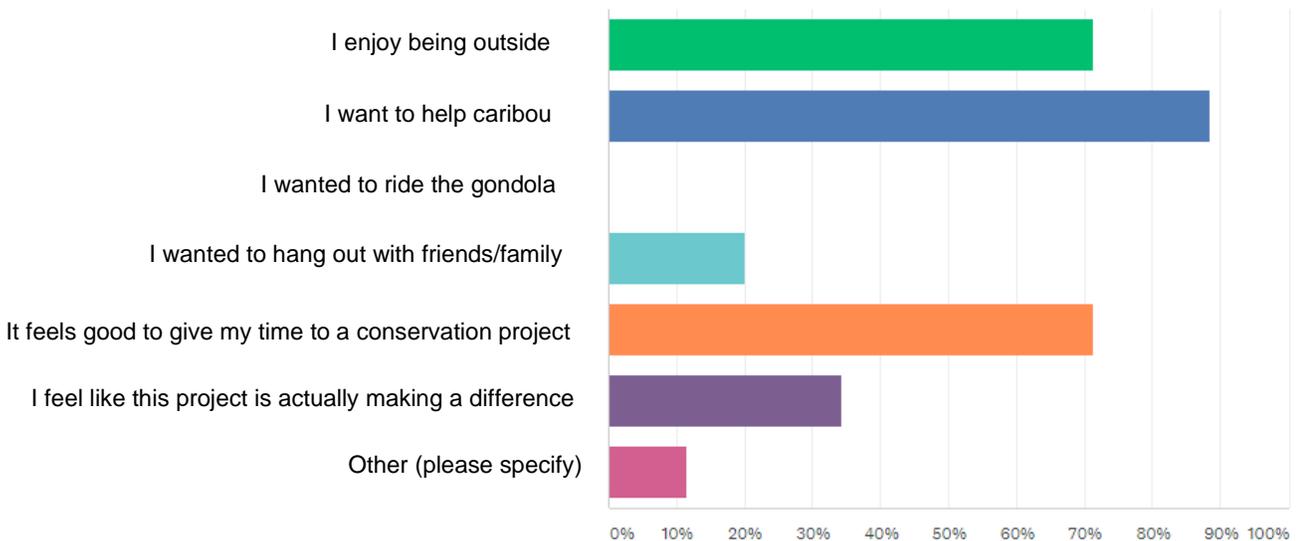
Answered: 35 Skipped: 0



Other responses: Coordinator, Stoke list, through Alberta Biodiversity Monitoring Institute, via email directly from your organization, Directly from RCRW Board Member, friend suggested it, was on RCRW board, Client at work, I can't remember exactly. I think it might have been through Begbie View Elementary

What motivated you to spend your time picking lichen? (check all that apply)

Answered: 35 Skipped: 0



Other responses:

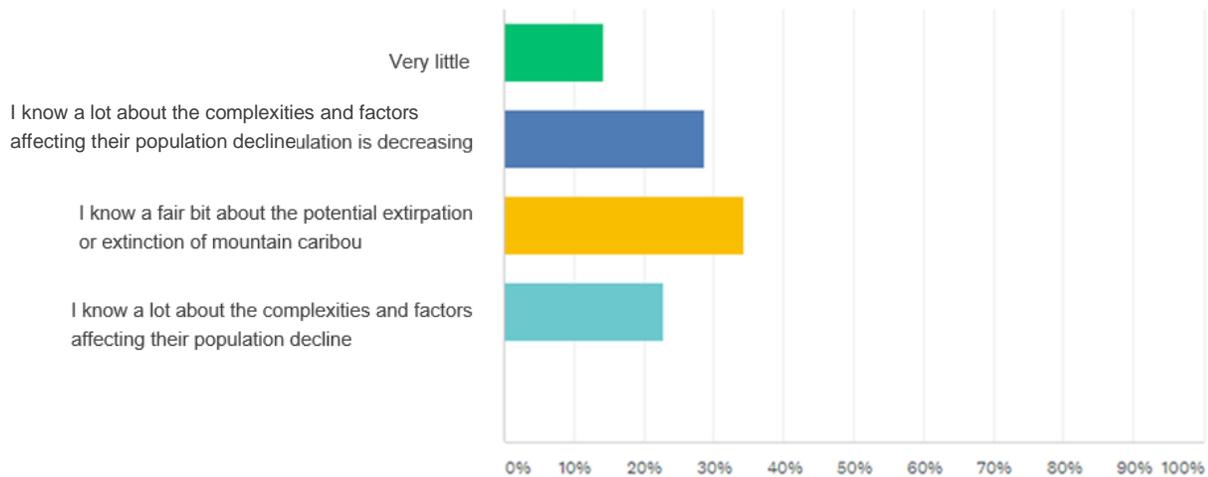
- It was a good team building activity for work colleagues to rally around
- My son participated as part of a school group. I was unable to attend, however my motivation was to help the caribou
- Wanted to meet people
- I actually never picked lichen, I'm a lichen technician and wanted a job. That's why I was curious about the project

How many times did you pick lichen and which years, between 2014-2018?

- Once – 7 people
- 2-5 times – 17 people
- 6-10 times – 4 people
- 11-15 times – 2 people
- 16-20 times – 4 people

How much did you know about caribou in this region prior to lichen picking?

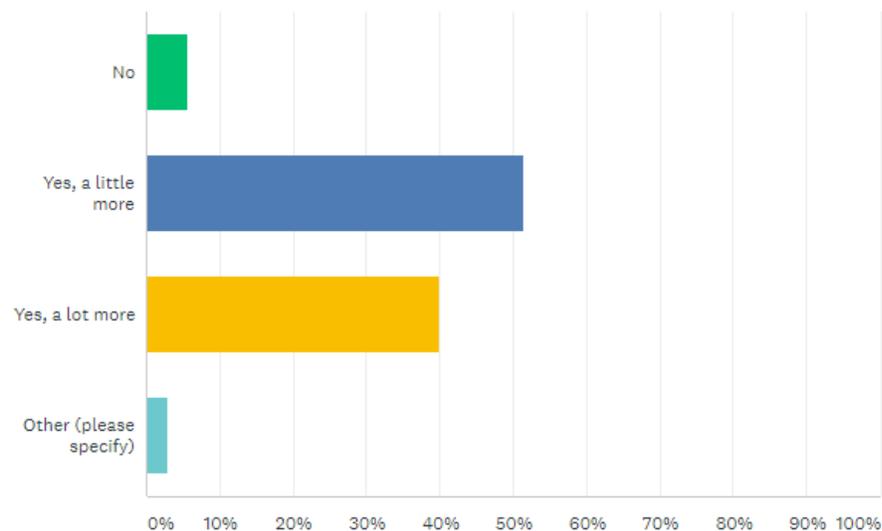
Answered: 35 Skipped: 0



|

Do you feel that you learned more about caribou while lichen picking?

Answered: 35 Skipped: 0



Is there anything you would change about the lichen picking program?

Overall, the lichen picking program made an impression of being well organized, rewarding, and fun, with great appreciation between coordinators and volunteers. Some logistical and social suggestions included providing lichen picking at different times of day, providing more social events like barbecues.

There was an interest in seeing more pictures of the actual caribou involved in the maternity pen. Another suggestion was to provide a pre-trip information package to corporate groups so that they could minimize the time spent on introductions and could have roles and teams self-designated before arrival.

Was there anything else that you got out of your experience lichen picking?

There was a sense of gratitude for the program, and the fact that people are working to help caribou. It helped people feel connected to their community, to the landscape and to the people working to make a difference for caribou. For some, the experience was simply a fun time helping out, a nice experience in the outdoors, a chance for “feel-good” conversations and meeting new people. Many remarked that they met new friends on their lichen picking experience.

“I have trouble passing a tree with lichen on it without thinking about picking”

People gained an appreciation for old growth forest, “and the amount of time it takes for lichen to have a place to grow in the first place.” One person joked that they have trouble passing by a good lichen tree without thinking of picking.

RECOMMENDATIONS

The conclusions and recommendations in this report are based mainly on direct recommendations and suggestions made by participants during interviews. Additional recommendations were interpreted from other comments made by participants.

Key for Multi-stakeholder Projects

Recommendation: Multi-stakeholder projects need to consider keeping a very narrow scope in order to ensure that everyone will stay at the table. If the discussions or deliverables broaden, then there is a high likelihood that organizations will run into conflicts.

Internal and External Communications

As expected, many lessons were learned in relation to communications, and the recommendations below include topics such as transparency, confidentiality, efficient internal communication systems, clear external communications, as well as First Nations perspectives.

Recommendations:

Create a clear communication plan that outlines the level of transparency the group is comfortable with for both internal and external communications. Ensure that confidentiality and transparency guidelines are written into contracts. Be sure to define clearly in each contract who owns intellectual property in the terms of reference.

Employ a robust and up-to-date internal communication system that is accessible to all and ensures that people can access pertinent information without being overloaded with unnecessary communications. This could include an internal digital group chat running so that things can be discussed right away, everyone can stay informed and have their voice heard. For more general internal updates, circulate a weekly newsletter consolidated by the secretary and contributed to by each lead. This newsletter could also be circulated to an “outer ring” such as funders, on a regular basis. First Nations can offer unique perspectives on effective communication methods and space should be made to explore options. The First Nations blessing ceremony can enrich relationships within the group and to the land.

Consider how much information is shared with media and public and determine if certain information will be filtered out if it does not serve the primary goals of the project. Ensure that

this decision is made with consideration for what the public expects, to gain public support. The multi-stakeholder approach in editing and fine-tuning communication products is important because each stakeholder can offer perspective on how their audience will receive it. Consider adopting moment to moment unfiltered transparency on the website and with the media, because people seem to gain a sense of things regardless. Aim to have a consistent communications person to ensure that communications are always up to date, especially through critical periods.

Human Dynamics

There were certainly a lot of opportunities to learn about working together throughout this project. Having people with different mind-sets around the table encouraged and created debate, which made the project more well-rounded. The recommendations around human dynamics include suggestions relating to personality types, temperament, responsibility, work cultures and ego.

Recommendations:

Consider how to manage personality with structured systems to avoid conflict where possible. Strong personalities are often good at getting things done, but can also create interpersonal conflict or frustration. Strong personalities can be present in both men and women, and in younger and older people. A balance of all types of personalities at the table is helpful to success. Be conscious of your own personal biases when working with others and try not to let them cloud the information coming from another team member, whether they relate to age, gender, or level of education.

People who are coming to the table have the responsibility to speak their truth. Quiet people have to do self-work; it is up to the group to make them feel safe, but there is a responsibility on their part to speak up.

Success of the group relies on healthy egos, accepting other's opinions, staying focused within the scope of the project and accepting compromises. People come from different work cultures - academics are trained to defend their perspective with rationale, but some people are not used to that culture.

One recommendation that was repeatedly expressed was to expect friction in a situation where the learning curve is steep and there are many people involved.

Funding and Contributors

When considering the financial scope of a project, the prospects of raising funds can be overwhelming. However, a few key lessons were learned about funding.

Recommendations:

Building a reputation and securing more funding will lighten the load on people over time.

Trust that as “the net widens” (as more people and funders become involved), the load will be more spread out over many hands and will reduce burnout.

Government employees should be non-voting members on the board, or should not be on the board. If that branch of government is contributing funds or time, it can be perceived as a conflict of interest.

Maternity Pen Operations

Most of the recommendations in this report can be applied to a variety of multi-stakeholder projects. This section is dedicated to recommendations specific to the maternity pen. However, some of the recommendations may be valuable to other types of projects with protocols and operations.

Recommendations:

- First Nations blessing ceremonies enrich relationships within the group and with the land and blessing ceremonies at intervals recommended by First Nations are encouraged
- Clear protocols for the pen need to be delivered by experts such as veterinarians at the beginning of the project and the beginning of each season.
- Ensure that people’s previous experience and skills are acknowledged and incorporated so that there is buy-in and adherence to protocols.
- Ensure the protocols feel practical and deliverable for operational staff.
- Communication protocols should be established for reporting to the board from pen at specific intervals with specific information.
- Include shepherds on calls, so that they can add their perspective and improve buy-in.
- Have regular monthly meetings for all operational staff.
- Have a debrief from all hands-on operational people at the end of each season before everybody would go their separate ways.
- For shepherds at the pen, stagger shift changeovers to encourage continuity of care.
- Maternity pen site should include an isolation pen.
- Ensure that there are no domestic animals on the property.

Critical Periods

Throughout the project, there were critical periods, including capture, calving, and mortalities in the pen. These were stressful times and a debrief report of a critical calving period in 2018

provides additional recommendations. The recommendations in this section are based on interview results. People working operationally at the maternity pen site had the most suggestions relating to critical periods. Recommendations in this section are mainly focused on this project but may be applicable to other projects.

Recommendations:

- Ensure that someone in town is on call twenty-four hours a day, seven days a week to support operational staff on-site, regardless of weekends and vacation periods, in order to ensure that supplies can be promptly delivered to the pen.
- Create Incident Command System (ICS) plans for any potential critical periods including capture days, predator infiltration and mortalities in the pen.
- If a critical incident occurs, ensure that all key players are represented on each call and for each discussion during a critical incident.
- Consider the timing of capture in relation to fiscal year end for funders and find ways to bridge funding if critical periods overlap with fiscal year end. The capture period overlapped with fiscal year end for funders and that made finances tight and time pressure high during the capture period.

Lichen Picking

Results from the lichen picking surveys could be applied to most volunteer and community engagement activities.

Recommendations:

Lichen picking activity would have benefited from fact sheets and clear ideas on what information was being made public.

Consider a lichen collection strategy that increases efficiency and minimizes impacts to lichen populations. This could include multiple days in a row based at one really good more remote site which could prove more efficient, as the sites closer to town were getting depleted over time.

Diverse Stakeholder Buy-in

Some stakeholders had stronger engagement than others. There is a lot to learn from the organizations that were less involved with the project, because they may not have a strong understanding of the project and as a result, they may have less buy-in.

Recommendations:

Provide an orientation for new board members that includes a history of the organization, goals, and funding. If you ask a group to be represented on the board, it is critical that they feel that they have a voice and that their opinion is valued.

Ensure each new board member has the opportunity to sit down with someone to learn more about the project and have a full understanding of how it works, and what role each board member is playing. Provide a comfortable space away from the larger group and encourage them to ask tough questions, voice concerns and have a critical eye.

Clarify who is being paid to sit at the board meetings. This may prevent concerns about the discrepancy between paid and volunteer positions on the board. Consider offering volunteer members a stipend for attending meetings. Further to that end, ensure that unpaid board members, who may be taking time off of work to attend meetings, are given preference with regard to scheduling meeting times.

Engage each member in their area of expertise with respect to their contributions to the project to ensure that every board member and stakeholder group feels useful.

CONCLUSION

The timeline of the Revelstoke Caribou Rearing in the Wild five-year pilot project spans almost a decade from inception to wrap up. It came to be through a unique combination of passion, dedication, knowledge and most importantly, concern for the survival of the unique mountain caribou in the Columbia Mountains. The scientific findings in relation to the success of this project as a measure to protect caribou are in the Scientific Report. The success of RCRW as a long-term, complex, multi-stakeholder project was certainly affirmed through the process of interviewing those most closely involved. The social learnings from this project are broad, and as diverse as the stakeholders that gathered around the table. It is the hope of the RCRW that these findings can help other endeavours that seek to protect caribou, as well as other conservation efforts and even unrelated projects that involve multi-stakeholder groups.

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APPENDICES

Interview Questions for Board Members, Contactors and others

Warm up questions

How's your spring going?

How's your week going?

(Have you been biking/running/hiking/paddling much lately?)

We are going to transition to the interview now.

I would like to clarify a few things:

We are looking to learn as much as possible from this with respect to the human component of the project. There are many positive aspects of this project that we can learn from. However, there are many things that we can learn from the aspects that weren't working well. Perhaps there is more to learn from the parts that didn't work well. So please don't edit your responses for the sake of being kind. We want to gain as much knowledge as we can to benefit all future projects.

Anonymity

Throughout this interview, I'll ask you to answer questions on behalf of and in relation to the organization that you work for/with.

At the end, I will check in and allow you to add your thoughts with anonymity and your responses will not be associated with any individual organization or individual. This will allow you to speak freely and offer any additional learnings and insights from your experience with the project. However, I also encourage you to add your personal perspective throughout the interview as well, and I can ensure that anonymity will be maintained wherever you ask for it.

Individual Questions

1. What organization/company do you work for?
2. How long have you worked with this organization/company?
3. What level of related education and/or training do you have? Have you had any additional training since you became involved?

Motivations for being involved - How did you come to join the RCRW caribou maternity pen project?

4. When did you start working with the RCRW and in what capacity?
5. What were the professional reasons that you became involved in the project?
6. Were there personal reasons that you became involved in the project, and what were they?
7. What relationship did you have with caribou in your work before the project?
8. What relationship did you have with caribou in your personal life before the project?
9. What relationship did you have with others/those in the RCRW prior to the project?
10. What have you gotten out of your participation in the project?
11. What parts of the project would have been detrimentally affected had you stepped down?

Structure and Function of RCRW

12. What was the reporting structure for you in relation to the board and the executive director? Which role or roles did you report to?
13. Do you feel that this structure worked for you?
14. Once you became involved, did you consider stepping away, or did you step away from the project from the project and if so, what were your reasons? *Be careful not to use leading questions* (ie. not satisfied with RCRW, personal/professional reasons drew you elsewhere, other?)
15. What could have been improved with respect to communications during regular operations?
16. What could have been improved during critical incidents? What sort of evolution happened over time? And over different types of incidents?

Overall Project Impressions

17. Do you feel that the RCRW was successful in terms of carrying out a 5 year multi-stakeholder collaborative pilot project?
18. What specific things could have been done differently to improve collaboration and communication?

Anonymous Questions

Now you will have a chance to share any additional thoughts without having them directly associated with you. 19. Is there anything that you would like to add with respect to your experience with RCRW?

Interview Questions for Contributors and Funders

1. How long has your organization been funding environmental projects?
2. How did your organization become involved with the RCRW as a contributor/funder and when did that occur?
3. Did the project help your organization in meeting your objectives and if so, which ones?
4. Is there anything that stands out as different or unique with the Revelstoke Caribou Rearing in the Wild project, compared to other projects that you fund or contribute to?
5. Were communications from RCRW adequate throughout the project? Did they follow a clear reporting structure, and if so, what was it? Did this structure work for your organization?
6. Is there anything that could have been done differently to improve communications or collaboration during the project?
7. Are there any things that stand out as a success with the project?
8. Did you or do you have any concerns about the project? And if so, what are they?
9. What has your organization gotten out of your participation with the project?
10. What aspects of the project would have been detrimentally affected had your organizations contributions been removed? Did you consider removing your contributions and if so, why?
11. Do you feel that the RCRW was successful in terms of carrying out a 5 year multi stakeholder collaborative pilot project?
12. Is there anything that you would like to add with respect to your experience with RCRW?

Survey Questions for Lichen Picking Volunteers

1. How did you hear about the lichen picking volunteer opportunity?

- Friend
- Website
- Newspaper article
- Facebook
- Other (please specify)

2. What motivated you to spend your time picking lichen? (check all that apply)

- I Enjoy being outside
- I want to help caribou
- I wanted to ride the gondola
- I wanted to hang out with my friends/family
- It feels good to give my time to a conservation project
- I feel like this project is actually making a difference
- Other (please specify)

3. How many times did you pick lichen and which years between 2014-2018?

- Once
- 2-5
- 6-10
- 11-15
- 15-20
- Which year(s)

4. How much did you know about caribou in this region prior to lichen picking?

- Very little
- I know that their population is decreasing
- I know a fair bit about the potential extirpation or extinction of mountain caribou
- I know a lot about the complexities and factors affecting their population decline
- Other (please specify)

5. Do you feel that you learned more about caribou while lichen picking?

- No
- Yes, a little more

- Yes, a lot more
- Other (please specify)

6. Would you volunteer again to pick lichen for caribou if there are related projects in the future?

- Yes
- No
- Maybe
- Reason

7. Is there anything you would change about the lichen picking program?

8. Was there anything else that you got out of your experience lichen picking?

9. How many years have/did you lived in Revelstoke?

- 1
- 2-4
- 5-10
- 11-15
- 16-20
- Other (please specify)