

# The Co-Management Review

*From the Project:*

Criteria and Indicators of Joint Forest Management

January 2004

Issue #2

Welcome to the second edition of the Co-Management Review, a series of newsletters about the research project *Criteria and Indicators of Joint Forest Management*. This project is attempting 1) to develop a method for identifying local-level criteria and indicators of effective co-management, and 2) to develop a set of local-level criteria and indicators to direct, monitor and evaluate co-management of the John Prince Research Forest. We are trying to find out what people think about co-management processes and outcomes. We hope to apply the findings to improve co-management of the JPRF and to assist other groups in enhancing or developing co-management in their area. In this issue, you'll learn about our research progress and news about other activities on the John Prince Research Forest. Articles for this edition were written by Regine Halseth, Erin Sherry, and Bev Leon, and the newsletter was designed by Sarah Parsons. We hope you enjoy this issue!



## Project Update



Since our last update, we've been hard at work training, identifying research participants, and conducting interviews. Erin completed research methods training with Bev, Regine, Ron and Sarah. We practiced our skills, and tested our interview with ten volunteers. We refined our questions and methods, and began interviewing re-

search participants in mid November. So far, we've completed over 30 interviews, nearly half of our total. We've continued to invite new participants as peer recommendations are received. Erin has also been busy writing proposals for our work next year.

On December 8<sup>th</sup>, most of our team participated in a tour of the John Prince Research Forest (see article on page 4) and attended the launch of an exciting new project (see article on page 8).

We'd like to thank our dedicated interviewees, who have contributed thoughtful effort and generously set aside time for interviews. We're hearing lots of great ideas and receiving valuable input.

Once interviews are complete, we will focus on transcription. Transcripts will be returned to interviewees for verification. After preliminary analysis is completed, results will be distributed, and we will begin preparing for our workshop in March.

Happy new year everyone!

### Contact Us

If you have any questions about the project, please get in touch with us.

Dr. Gail Fondahl, UNBC  
(250) 960-5856 or  
fondahlg@unbc.ca

Sue Grainger, JPRF  
(250) 648-3322 or  
grainger@unbc.ca

Dr. Erin Sherry, UNBC  
(250) 960-6673  
sherry0@unbc.ca

- or our interviewers -  
Bev Leon / Ron Winsler  
(250) 648-3221

Regine Halseth (250) 960-5934  
Sarah Parsons (250) 960-6357



Roy Rea, UNBC researcher, points out a wildlife monitoring camera for a project on the JPRF





# Update from Beverly Leon

## Tl'azt'en Nation Research Associate

In September, I started working part time with UNBC on a research project titled - *Criteria and Indicators of Joint Forest Management*. My employment runs until March 2004. So far, the process has been rewarding. I enjoy the challenge of learning and growing, and hope that I can use my newly acquired skills in research to benefit our community. That's my personal goal.

On a more professional level, and because I believe in the outcomes of this project, I intend on ensuring that the Tl'azt'en and First Nation perspective is well represented. I also hope to promote cross-cultural sharing and learning. So far, the positive response I've received from community members and others has been great.

The eventual outcome of this research is to determine what is working and not working in the partnership between UNBC and Tl'azt'en Nation (Chuzghun Resources Corporation and the John Prince Research Forest) and how we can improve co-management so that both parties benefit. I envision a time when other First Nations may apply the model used in the JPRF partnership.

The *Criteria and Indicators of Joint Forest Management* research program began with a project overview and training. Shortly

thereafter, interviews were conducted with current JPRF Board of Directors, staff, and the Advisory Committee who suggested names of potential research participants. Next, individuals were invited and given the opportunity to recommend other important people to interview. This was



### "I hope to use my newly acquired skills in research to benefit our community" - Bev Leon

followed by ten pre-test interviews to ensure that our research methods and tools were effective. From these pre-tests we were able to revise the questions, evaluate our interview style and come up with a final interview guide. It was a long process, but important to ensure consistency of results among interviewers and that the research is meaningful to the variety of participants.

Interviews are being scheduled for the months of December and January. There are three interviewers. Regine Halseth will be interviewing folks from UNBC. Sarah Parsons will be interviewing folks from Fort St. James and I will be interviewing Tl'azt'enne and individuals selected from other First Nation communities in the area. It's going to be a jammed packed

two months of interviewing.

After this process is finished, we will analyze interviewee's input, prepare a report on outcomes, and host a project workshop to share project findings. It's a very exciting process and I have gained valuable research skills, which I hope to use in the future.

Nanyoostenl'a

(I shall see you again)

☺ Happy New Year ☺

-Beverly Leon



# Participant Selection

## *How were people chosen?*

Have you, a relative, a colleague or neighbour been contacted to discuss the elements of effective co-management? How were research participants chosen and invited to take part in the project? We designed a process to help us identify significant and expert participants in the JPRF case, not being able to interview everyone. It is important that the range of knowledge, experiences, values, and interests are represented in our project. With this in mind, we used several different methods to identify research participants.

The first step was to identify the groups who were interested in or had potential to impact the JPRF from Tl'azt'en Nation, UNBC, the community of Fort St. James, as well as regionally, nationally, and internationally. We wanted to ensure that all significant forest actors, not just "forest experts", were identified. We determined which groups had a close connection to the forest by looking at:

- geographic proximity and emotional closeness,
- whether they had any pre-existing rights to the forest,
- their level of dependency on the forest,
- the local knowledge they had, and
- the degree to which their culture was integrated with the forest.

The second step in the process was to find out who we should talk to. We were looking for individuals with experience and interest in the JPRF, forestry issues, community needs and values, and co-management. Since we did not want to choose participants ourselves, we did this through a peer recommendation process. We asked current JPRF Board members and employees, collaborators from the Fort St. James area, and JPRF Advisory Board members to help us identify people who were representative, knowledgeable,

and have standing in their community, and have an interest in or potential to impact the JPRF. A total of 26 people helped us with this process, which resulted in the identification of 46 participants. Each person invited to take part had to receive nominations from at least three of their peers.

Once we identified an initial pool of participants, they were contacted, presented with an information package, and asked to complete an interview. These people were given the opportunity to look over the list of participants and to recommend additional individuals. This generated a second pool of participants who were invited to take part. Again, a person had to be mentioned by 3 of their peers. These people were also given the opportunity to nominate new interviewees, and so on and so on, until no new participants were identified. This approach is called 'snowballing'.

Next, we asked participants to tell us their story. This included information on their life experiences, their reasons for participating, and their expectations for the project. To ensure that no important perspectives were left out, we evaluated the biographies of all our interviewees and compared the results with our list of significant forest actors (identified in step 1). As a result of the peer recommendation process, only two of 34 significant groups are not represented in the interview process.

In total, our selection process resulted in the identification of 65 participants. Their response has been very positive with only 3 people declining. Thanks to all participants for their enthusiasm and dedication to the project!



## Project Participants



Amelia Stark, Director of Education for Tl'azt'en Nation, former member of JPRF Board of Directors.



Jim Togyi, Mayor of Fort St. James, and member of JPRF Board of Directors



Rebecca Vaughan, UNBC wildlife and fisheries student, and former research assistant for the JPRF



# News from the JPRF

On December 8, 2003, members of Tl'azt'en Nation and UNBC were provided with a tour of the John Prince Research Forest. The day-long event was attended by Chief Thomas Alexis and several Tl'azt'en Nation councillors, Dr. Charles Jago (President

Forest. Dr. Lewis felt that a field tour would provide people with a first-hand opportunity to learn about JPRF programs and activities, and to understand issues that the Research Forest faces.

The tour began with a visit to Tache to meet informally over coffee with Tl'azt'en Nation leaders such as Chief Tommy Alexis, Amelia Stark, and Clarence Pierre, as well as other interested community members. This was followed by a snowy 3 km walking tour of the northwest portion of the Research Forest where Roy Rea, Sr. Forestry Lab Instructor, provided an overview of access and wildlife issues on the JPRF, and the importance of

research on the JPRF over the next five years.

The afternoon was devoted to exploring the southwest portion of the Research Forest; research and educational opportunities provided by the JPRF were featured. Bruce Rogers, a graduate student at UNBC, discussed his research on the death of Douglas-fir in partially cut areas and management issues related to this phenomenon. This was followed by an overview of mule deer winter range requirements and forest management implications. After hiking a traditional trail, the tour moved into a traditional pit house built by Tl'azt'en Nation youth, where a warm fire and bannock awaited everyone. Here, Dr. Erin Sherry provided an overview of the *Criteria and Indicators of Joint Forest Management* project and Beverly Leon presented an overview of the *Yunk'ut Whe Ts'o Dul'eh* (We Learn From Our Land) program initiated by the Chuntoh Education Society. The tour concluded with a walk to explore old-growth Douglas-fir stands. It was an information-rich and fun-filled day on the JPRF enjoyed by all participants.



The group touring the northwest portion of the research forest.

of UNBC), Dr. Sharon Cochrane (Vice-President of Finance and Administration), Dr. William McGill (Dean of the College of Science and Management) Dr. Jim Randall (Dean of the College of Arts, Social and Health Sciences), Tl'azt'en Nation staff and community members, UNBC faculty and staff, and JPRF employees. The tour was organized by Dr. Kathy Lewis, Co-Chair of Chuzghun Resources Corporation, the non-profit organization created in 2001 to direct and manage the John Prince Research

mineral licks to forest management. Dexter Hodder, JPRF Research Co-ordinator, addressed the fundamental importance of keyholder involvement, trapping, and other traditional land uses on the JPRF. The tour then moved to the Cinnabar Resort for lunch, providing a venue to discuss opportunities for facility development. A highlight of the lunch break was the official announcement of a \$1,000,000 SSHRC grant to a Tl'azt'en Nation and UNBC partnership to conduct



UNBC President, Charles Jago and VP of Administration and Finance, Sharon Cochran examine soil collected from a mineral lick on the JPRF.

## UNBC Research on the JPRF

The John Prince Research Forest occupies a portion of Tl'azt'en traditional territory, has a lengthy history of commercial logging, and contains a diversity of forest types. The JPRF includes a number of interesting physical features such as the Pinchi fault, three biogeoclimatic sub-zones, and Douglas fir at the northern extent of its range. There are many traditional uses of the forest; for example, Tl'azt'enne harvest berries, hunt moose and deer, and use the land for spiritual and contemplative pursuits. As such, the JPRF provides an ideal setting for conducting research from both a natural and social perspective.

The JPRF operates as a research facility and has an internal research program. The JPRF offers a range of research opportunities in areas such as forestry operations, wildlife, recreation and tourism, environmental studies, social science, and community development. Since its inception in 1999, students and researchers have undertaken a wide range of projects on the JPRF.

### Undergraduate Research

The JPRF hosts UNBC's Resource Management Field Camp held annually in August. Students learn about different aspects of forest management, including ecosystem management, soil and water conservation, engineering, silvi-

culture, and stand dynamics. They also learn about First Nation values, needs, and land uses; wildlife management; recreation management; and rural community

interests. Each year, students collect data on particular themes; for example, seasonal mineral lick utilization by moose, bear denning ecology, access management, vegetation management, and ungulate habitat conservation.



Bruce Rogers studying Douglas-fir dieback

A number of undergraduate students have written professional reports on various aspects of JPRF management as part of their Registered Professional Forester (RPF) accreditation. Examples of these professional reports include:

- Considering Mineral Licks in Forest Management Practices
- Ungulate Response to Vehicles: A Review for the JPRF
- Community Forest Agreements in British Columbia: The Answer to Rural Community Sustainability
- Applying Landscape Resource Valuation Methods to Round Lake in the JPRF
- Reducing the Risks of Mixed-Wood Management Practices

Students have also completed independent studies and undergraduate theses on the JPRF. For instance, one student conducted a review of currently available literature to assess whether bear denning areas were adequately considered in forest planning, while another examined the types of community-based research methods

that were most acceptable to Tl'azt'enne. The relationship between roosting habitat for bats and the decay of aspen in the sub-boreal forests of BC was the focus of another study. In addition, volunteer and summer internship opportunities are readily available on the JPRF. Through these programs several students have assisted with studies of mule deer winter range, animal stream crossings, and the use of an iron-rich mineral aggregate excavation site by snowshoe hares.

### Graduate & Post-Graduate Research

The JPRF provides rich opportunities for graduate and post-graduate research. Studies completed or currently underway include:

- An evaluation of guano traps as a method for assessing bat activity within the JPRF
- Documentation of historical information to set reference conditions for ecological restoration on the JPRF
- Approaches to the integration of Aboriginal values into strategic level forest planning on the JPRF
- A study of Douglas fir survival on partially cut areas
- A study of natural disturbance within sub-boreal forests, and
- The development and evaluation of an Aboriginal forest planning process

### Faculty Research

In addition to the ongoing *Criteria and Indicators of Joint Forest Management* study, several UNBC faculty members are conducting research on the JPRF. Research emphases include managing ungulates and access, reconstructing what the land was like before commercial forestry, integrating traditional and scientific knowledge in forest planning, the use of wildlife tree patches by small mammals and birds, owl surveys, the effects of wind damage on partially cut areas, and ecotourism development potential.

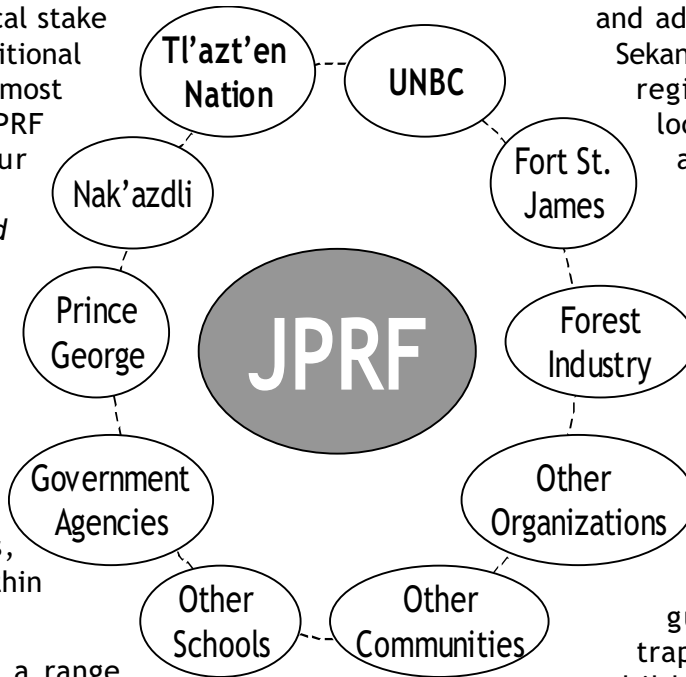
# Participating Communities

## *Who is being interviewed?*

Of the 68 participants nominated, 65 have agreed to participate in the project. There are 20 from Tl'azt'en Nation, 17 from UNBC, and 27 from other organizations and communities.

Different types of communities influence co-management of the JPRF. The project includes JPRF partners, neighbouring rural and First Nation communities, and regional communities (of these, we recognize that Tl'azt'enne have a critical stake in what happens on traditional lands and that they are most directly affected by JPRF decisions). While our project involves these *place-based communities*, we realize that values differ significantly among members of a community. Therefore, we also focused on *interest-based communities* or the assortment of values, concerns, and needs within each community.

From Tl'azt'en Nation, a range of knowledge, values, experience, and interests are represented, including: political leaders at the local, regional, and provincial level; hereditary Chiefs; Elders; keyoh holders; children and youth; women; traditional land users; people working in the forest industry; recreationalists; off-reserve Tl'azt'enne; residents of the different villages of Tl'azt'en Nation; and individuals representing land management, culture, history, education and training, and health.



The range of interests encompassed by UNBC representatives includes administration; finance; student services; researchers; educators; current students, both graduate and undergraduate; and students who have graduated from UNBC.

The range of interests involved from Fort St. James and other communities includes: Fort St. James Mayor and Council; Nak'azdli leaders, Elders, and land managers; leaders and advisors from the Carrier-Sekani Tribal Council; local and regional forest licensees; local forestry contractors and small businesses; the BC Ministry of Forests both in Fort St. James and Prince George; the BC Ministry of Water, Land and Air Protection; School District 91; Fort St. James Chamber of Commerce; Fort St. James Community Forest; rural neighbours of the JPRF; guide outfitters; trappers; recreationalists; children and youth organizations; the Community Natural Resources Committee; and mining interests.

For those of you participating, thank you again for the time and effort you have dedicated to the project. We greatly appreciate your contributions. With such strong community support, you have given us great confidence in the potential of this project.

# Interview Content

## *What questions are we asking?*

During Phase 2 of the *Criteria and Indicators of Joint Forest Management* project we are developing criteria of successful co-management to help direct, monitor, and evaluate the JPRF, and to assist other groups in the development and enhancement of co-management in their area. We are asking participants two sets of questions about what is needed to make co-management operate effectively and what co-management should provide in terms of outcomes and benefits.

The first set of questions focuses on the day-to-day operation and structure of the JPRF partnership. Questions address:

- representation of all interests
- decision-making
- necessary personnel and expertise
- the skills and qualities needed by people involved in co-management
- the tasks and responsibilities of co-managers
- necessary resources and support
- effective communication
- cross-cultural partnership
- integration of Aboriginal and scientific knowledge in decision-making
- research success
- education and training

The second set of questions relates to the results, outcomes, or benefits of the JPRF partnership. Specifically, we ask questions about:

- economic benefits such as employment, economic development, access to resources, and subsistence land use
- social benefits related to the health and well-being of different communities, recreation opportunities, education and training, and empowerment
- cultural outcomes related to the culture of any group or cross-cultural sharing and learning
- environmental results
- research priorities and approaches
- outcomes related to governance and policy



Ron Winsler transcribes interviews on his computer. He uses a transcription machine operated by a foot pedal. With sixty-five interviews, we've got a lot of work to do!

## JPRF News

### **Forestry Operations**

The JPRF is managed for multiple resource values, including timber extraction. The revenue generated from timber sales provides base funding for operation of the JPRF. As a result of their license to cut, the JPRF must fulfill silviculture obligations and meet all Forest Practices regulations. Recent harvesting activities have been dictated in large part by the Mountain Pine Beetle infestation. Local contractors from the Fort St. James area are hired to conduct JPRF harvesting and silviculture.

### **Internal Research**

The JPRF internal research program is designed to respond to current and future management issues on the Research Forest and is conducted by JPRF staff. Research activities focus on long-term trials (brushing, mixed wood management, spacing), monitoring (wildlife, streams, weather, snow depth), and special management issues (moose/access management, mule deer winter range, bear den investigations). These research projects provide information for co-management decision-makers and baseline information for future research projects.



# TL'azt'en Nation and UNBC Launch Research Project



Chief Tommy Alexis participated in the CURA announcement at Cinnabar Resort

**O**n December 8, 2003, a multi-year research project was launched at the John Prince Research Forest. The project, funded by the Social Sciences and Humanities Research Council (SSHRC), is a unique partnership between members



Dr. Gail Fondahl, Chair of UNBC Geography, is the CURA director

of TL'azt'en Nation and researchers from UNBC to enhance and diversify TL'azt'enne resource management capacity. One of six community-based projects from BC, Alberta, Saskatchewan and Quebec that will help strengthen Aboriginal communities and cultures in Canada, the project was funded as part of SSHRC's Community-University Research Alliance (CURA) Program, which emphasizes partnership and cooperation between communities and universities. Funding is for \$1,000,000 over a five-year period.



Sue Grainger, Manager of the JPRF, is the CURA co-director

The research plan encompasses four main streams, the objectives of which are:

- 1) To improve the existing John Prince Research Forest partnership through the development of local criteria and indicators of effective co-management processes and outcomes.
- 2) To improve TL'azt'en capacity to carry out research for the purpose of retaining, recording, and transmitting traditional ecological knowledge in order to stem the erosion of this knowledge base and to provide critical information for culturally appropriate resource management.
- 3) To explore innovative environmental education and training programs based on the alliance of traditional knowledge and science, which will contribute to curriculum development for TL'azt'en high-school students and UNBC undergraduates.
- 4) To identify TL'azt'en visions for ecotourism initiatives as a means of perpetuating traditional knowledge, and to address community requirements for training in order to participate in co-managed ecotourism opportunities.