

Socio-economic Benefits of Non-timber Uses of BC's Inland Rainforest Research Bulletin, January 2010

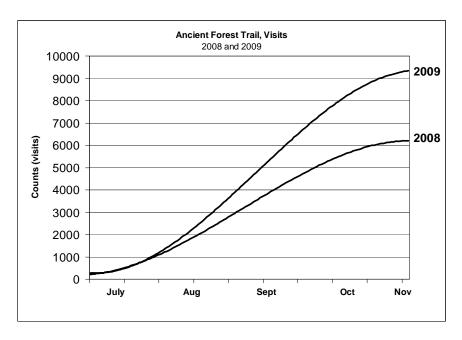
## Almost 10,000 Visits to Ancient Forest Trail in 2009

The upper Fraser River valley is home to a magnificant forest that is globally unique -- the only inland rainforest in the world that is 800km from the coast. Since September 2007, University of Northern British Columbia researchers have studied the community and economic benefits of non-timber uses of this inland rainforest. The aim is to inform ongoing debate about whether or not to harvest one- to two-thousand year-old cedars. While some protection of some of the cedars exists, much of the rare stands remain under threat of harvest.

The most visible and most easily quantified non-timber use of the inland rainforest are visitors. In particular, since

opening in September 2006, the Ancient Forest Trail has become a popular destination for day-trippers and international tourists. The Trail is easily accessed from Highway 16, between Prince George and McBride. A starting point for valuing non-timber uses is to better understand the number and types of Trail users. For this purpose a counter that 'sees' warm moving objects as they cross its path was installed on the Trail in May 2007. This counter is ideal for measuring trail usage.

Data collected over the past two years show a significant increase in the number of people using the Ancient Forest Trail, as illustrated in the chart. In 2008



there were 6,511 visits. In 2009 there were 9,693 visits. This represents an annual increase of 49%.

As part of this ongoing study, data were collected from trail users who completed surveys on weekends in early August of each of the past two years. The survey results suggest that most of the increased visits between 2008 and 2009 is from tourists, as opposed to day-trippers from surrounding areas like Prince George. This growth in tourist visits can be attributed to greater awareness of the inland rainforest in the region. For example, the City of Prince George 2009 Visitor's Guide features the

Continued on page 2

The purpose of this research bulletin is to communicate the results of on-going research on the socio-economic benefits of non-timber uses of the inland rainforest of the upper Fraser River valley in British Columbia. The information contained in this bulletin may be distributed freely with proper citation, as follows:

Connell, David J. 2010. Socio-economic Benefits of Non-timber Uses of BC's Inland Rainforest: Research Bulletin, January 2010. Prince George, BC: School of Environmental Planning, University of Northern British Columbia.

Fore more information about this study please contact Dr. David. J. Connell (email: connell@unbc.ca; tel.: 250-960-5835).

# New study to examine the affects of climate change on the inland rainforest

With contributions from Dr. Darwyn Coxson

A research team representing multiple areas of expertise has been assembled to study the vulnerability of BC's inland temperate rainforests to climate change. Over the next two years, the team will work with local people to develop strategies for managing the inland rainforest in face of predicted climate change, using a synthesis of scientific studies and knowledge already held by area residents.

BC's inland rainforest is a unique ecological phenomenon, sustained by a combination of topography and local climate effects that is globally unique. In the twentieth century this forest system was a major driver for economic growth and development, from local shake and shingle operations to value-added manufacturing plants. As we move into the twenty-first century the ancient cedars of this forest have become an iconic image for tourism, drawing visitors to B.C.'s interior from around the world. All the while this forest supports significant biological values, from ancient cedar groves, to mountain caribou habitat and canopy lichens.

Although our society often assumes that the social and biological values associated with old-growth stands like the inland rainforest will be maintained in perpetuity, this forest faces an uncertain future. Climate change has recently emerged as a major factor that must be considered. Current predictions suggest that the inland rainforest may be one of the more vulnerable biogeoclimatic zones in B.C. in face of future climate change. Changes in temperature and precipitation, as well as the incidence of natural disturbances such as fire and hemlock-looper, can have major impacts on the ability of inland rainforest stands to maintain biological and social values. The carbon budget of inland rainforest stands has also been raised as an important management issue: ror instance, are oldgrowth stands a carbon source or sink? The resolution of these issues will have a major impact on local communities, whose cultural, social, and economic identities are closely tied with the characteristics of their surrounding landscapes.

This research project will address questions about whether the inland rainforest stands will or can be sustained into the future and what are best management practices for these stands. Researchers will synthesise existing data sets and conduct field and community based studies to address knowledge gaps in the following areas:

- The expected magnitude of climate change faced by BC's inland rainforest;
- The vulnerability to climate change of existing ecological processes that sustain the inland rainforest;
- The role the inland rainforest plays as carbon sources or sinks and how will this be impacted by changes in management practices;
- Biological indicators of climate change that can be readily adapted for use by local groups;
- The predicted socioeconomic impacts of climate change, especially on non-timber values; and,
- Tools and information to help community based forest management adapt effectively to climate change.

For more information about this project, please contact Dr. Darwyn Coxson, Professor, Ecosystem Science and Management (Biology), University of Northern British Columbia, tel. 250-960-6646 or email darwyn@unbc.ca.

#### **10,000 visits** (from page 1)

Ancient Forest Trail on its cover. Furthermore, many of the tourist users who were surveyed told researchers that they heard about the Trail when they recently stopped at local Tourist Information Centres.

Researchers also learn about Trail users by reviewing comments written in the Trail's logbook. Visitors are invited to write their comments on what they think about the Trail, and to give the name of their hometown. Since May 2008, the Trail has hosted visitors from ten provinces, 21 U.S. states, and 24 countries.

Trail counts and visitor surveys will continue in coming seasons as part of this ongoing study on nontimber uses and values of the inland rainforest.

### The Recent History of the Inland Rainforest

The inland rainforest has been 'discovered' several times over, by First Nations peoples, early European settlers, and loggers. Most recently, biologists discovered its value for biodiversity and tourists, hikers, and day-trippers discovered its uses for recreation. Today, the inland rainforest is recognised as a global treasure. The following timeline describes the recent interplay of uses, values, and land use planning decisions related to the inland rainforest of the upper Fraser River valley.

#### 1994

• One of the first scientific publications to reveal the ecological significance of the inland rainforest was published.

Goward, T. 1994. Notes on old-growth-dependent epiphytic macrolichens in the humid oldgrowth forests in inland British Columbia, Canada. *Acta Botanica Fennica* 150:31-38.

#### 1999

• In an attempt to shift from timber management to environmental management, the Province of BC revised its land use planning processes with the aim to incorporate more non-commercial values such as wildlife, tourism, and cultural values. This change included the development of Land and Resource Management Plans (LRMPs) for the upper Fraser River valley.

Prince George Land and Resource Management Plan (January 1999)

http://ilmbwww.gov.bc.ca/slrp/lrmp/princegeorge/pgeorge/plan/toc.htm

"The Prince George Land and Resource Management Plan (LRMP) is a long-term plan for land use and resource development on Crown land within the Prince George Forest District. This plan is based on the principles of integrated resource management and sustainability. The Prince George LRMP document is an organized set of guidelines to be applied to the management of Crown lands and resources in the planning area. These guidelines include: objectives and strategies for general resource management;

resource management zone (RMZ) boundaries, including protected areas; resource management zone (RMZ) objectives and strategies; and an implementation and monitoring plan. The LRMP includes guidelines for the management of resources such as: energy, forestry, recreation, agriculture, range, minerals, fish, wildlife, transportation, heritage, culture and water resources. The approved plan provides strategic direction to land and resource planning, management and development for a period of ten years."

Robson Valley Land and Resource Management Plan (April 1999)

http://ilmbwww.gov.bc.ca/slrp/lrmp/princegeorge/robson\_valley/index.html

Robson Valley Sustainable Resource Management Plan

http://ilmbwww.gov.bc.ca/slrp/srmp/north/robson\_valley/index.html

#### 2000

• The growing appreciation for non-commercial values of the rainforest conflicted with some commercial uses of the rainforest. In July 2000 a formal complaint was submitted to the Forest Practices Board regarding salvage harvesting of looper-damaged timber. "The complainant was concerned about cutblock size, green-up conditions, biological diversity, consistency with the local land and resource management plan (LRMP), and harvesting in deferred areas." The decision of the Forest Practices Board supported the on-going commercial operations. The Board also noted, "The circumstances that led to this complaint occurred in 1995 and 1996, when many factors restricted the range of measures that were applied to maintain biological diversity in the course of salvaging timber from severely damaged forests. However, forest management practices have evolved since." Consequently, the Board made recommendations for forest managers to deal proactively with forest health issues, with special regard

for biological diversity at both the landscape and standlevel. Options to manage for all forest resources are reduced if a forest health problem, such as the hemlock looper outbreak, expands over large areas. "To allow such balancing in future, government should assign a high priority to the designation of landscape units and should assist district managers to designate and set biological diversity objectives for each unit."

Salvage of Hemlock Looper-Killed Timber in the Robson Valley

http://www.fpb.gov.bc.ca/assets/0/114/178/298/356/b7d5b595-9f66-4484-bd4e-0b7d653f2e41.pdf

- In September, 2000, the first scientific conference to focus on BC's inland rainforest took place at the University of Northern British Columbia: "The Interior Cedar Hemlock Stewardship Conference: Challenges of a Unique Ecosystem."
- Laws passed to establish Sugarbowl Grizzly Den Provincial Park (2000) and Protected Area (2001). The primary roles of the park and protected area are to protect critical habitat for the mountain caribou, which is rated as threatened by COSEWIC and red-listed provincially: to protect the historically significant Grand Canyon of the Fraser; and to provide outstanding backcountry recreation opportunities within one hour of Prince George...The secondary role of the park and protected area is to provide representation of the Upper Fraser Trench Ecosection and the Interior Cedar-Hemlock very wet cool, Slim variant (ICHvk2) Biogeoclimatic zone."

http://www.env.gov.bc.ca/bcparks/planning/mgmtplns/sugarbowl\_grizzly\_ps.pdf

• Law passed to establish Slim Creek Provincial Park. "This 506-ha park protects an old-growth cedar-hemlock forest, alluvial terraces and wetlands in the Upper Fraser Trench and Caribou Mountains ecosections. Most of the park supports a very wet, cool Interior Cedar Hemlock biogeoclimatic subzone, while very wet, cool Sub-Boreal Spruce is found at higher elevations."

Slim Creek Provincial Park: Purpose Statement and Zoning Plan (2003)

http://www.env.gov.bc.ca/bcparks/planning/mgmtplns/slimcreek/slimcrk\_ps.pdf

#### 2001

• In January 2001, another formal complaint was submitted to the Forest Practices Board. This complaint centred on deviations from the approved forest development plan. The Board supported the District Manager's decisions. In its response the Board acknowledged the discrepancy between current harvesting and knowledge of the rainforest's values.

"The next forest development plan, which must cover five years and not just one, will have to reflect controversial operations in a relatively poorly understood forest type. That forest development plan will have to incorporate the new and best information available on sound forest management in the old stands in the interior cedar hemlock biogeoclimatic zone."

Timber Salvage near Ptarmigan Creek, east of Prince George

file:///C:/Documents% 20and% 20Settings/ Valued% 20Customer/My% 20Documents/Projects/ Ancient% 20cedars/resources/Govt% 20documents/ FPB% 20Complaint% 202001% 20IRC47.htm

#### 2002/03

• Old Growth Management Areas (OGMAs) for Slim, Dome, and Humbug landscape units legally established. Ungulate Winter Range designations for mountain Caribou and Mule Deer habitat established.

Establishing Ungulate Winter Range Objectives – Omineca Region

http://www.env.gov.bc.ca/omineca/documents/elliot\_terry\_uwr\_omineca2.pdf

#### 2004

• An Order to establish aspatial landscape biodiversity objectives for the Prince George Timber Supply Area was approved for old forest retention, old interior forest; and, young forest patch size distribution. The Order set the minimum portion of Crown Forest Land Base to be retained as old forest at 53 per cent for the ICH wk3 and ICH vk2 and 46 per cent for the SBS vk. "These objectives were developed using current scientific information with respect to the natural range of variability within this geographic area. They are designed to balance the requirements of environmental and economic sustainability, while considering the expected impacts of the current mountain pine beetle

infestation. These objectives will be periodically updated to incorporate new knowledge and address changing environmental economic and social conditions. In ensuring that their plans are consistent with the objectives of this Order, licensees and BC Timber Sales, should consider the Implementation Policy, which supports this Order."

Prince George Timber Supply Area (TSA) Legal Order (October 20, 2004) - Landscape Biodiversity Objective Order

http://ilmbwww.gov.bc.ca/slrp/srmp/north/prince\_george\_tsa/index.html

#### 2005

• Visual Quality Objectives (VQO) along highway 16 were established (December 7, 2005). A VQO reflects desirable physical characteristics and social concerns for an area with the aim to protect the world-renowned landscapes of BC as a source of everyday enjoyment.

#### 2006

• The Driscoll Ridge Trail and Ancient Forest Trail were officially opened on September 24, 2006. 80 people attended the official opening.

The premiere screening of the film *Block 486* took place in Prince George on November 17, 2006. The film introduces viewers to BC's inland rainforest by exploring whether or not a stand of ancient cedars (designated as Block 486) should be harvested.

#### 2007

• A third complaint concerning management of the inland rainforest was filed on April 20, 2007. The complaint focussed on approved cutblocks and harvesting practices that did not address the government's biodiversity objectives and impacts of approved harvesting on the Driscoll Ridge hiking trail and the Ancient Forest hiking trail. The complainants requested that government (1) spatially define OGMAs to secure the biodiversity of the interior cedar-hemlock rainforest; (2) consider all approved cutblocks as part of this process; and (3) place a moratorium on logging in all known 'antique' cedar stands. The Board's response was issued in March 2008 (below).

#### 2008

- In February 2008, TRC sold its forest licence to harvest the cedar-hemlock stands of the inland rainforest. The volume was transferred to beetle attacked pine stands elsewhere.
- In April 2008, the Integrated Land Management Bureau (ILMB) released a comprehensive report that documented the significance of the inland rainforest and the importance of its management: Guidance and Technical Background Information for Biodiversity Management in the Interior Cedar Hemlock Zone within the Prince George Land and Resource Management Plan Area.

"The purpose of this document is to share information with other forest professionals on biodiversity management in Interior Cedar Hemlock (ICH) forests in the Prince George Land and Resource Management Plan Area. It is the intention of the Integrated Land Management Bureau (ILMB) that this paper will provide useful information; however, ILMB would like to stress at the outset that this is not to be interpreted as direction. This paper is intended as guidance only and is not legally binding. ILMB will work with the Ministry of Forest and Range and forest licensees to implement this guidance. If biodiversity management in the ICH is significantly inconsistent with this guidance, future legal objectives may be considered by government. Through project work, staff in ILMB have collected and synthesized available scientific and technical information on biodiversity management in the ICH into both technical guidance, maps and background information which is intended to assist professionals in the development of operational plans. The background also discusses socio-economic information that may assist both professionals and statutory decision makers in future planning in the ICH area."

The guidance report included the following.

- Biodiversity should be maintained at multiple spatial and temporal scales
- Identifies areas of high and medium biodiversity value that are outside Old Growth Management Areas and parks: 4,770 ha of 'guidance' OGMA (i.e., 'non-legal' OGMA); approximately 4,000 ha of high biodiversity value area; and 15,000

ha of medium biodiversity value area.

- A failure to accommodate biodiversity in planning can diminish the capacity of forests to continue providing ecological services
- The environmental and social risks of current biodiversity management enactments are significant
- May require a spatial approach to management.
- Recommends retention of areas identified as High Biodiversity Value; if all of the High Biodiversity Area is retained, prioritize Medium Biodiversity Value areas for retention.

Guidance and Technical Background Information for Biodiversity Management in the Interior Cedar Hemlock Zone within the Prince George Land and Resource Management Plan Area (April 2008) http://www.ilmb.gov.bc.ca/slrp/srmp/north/ prince\_george/ICH\_biodiversity\_guidance\_2008.pdf

- A second conference, *BC's Inland Rainforest Conservation and Community*, was convened at UNBC May 21–23, 2008. This conference highlighted emerging research findings with the aim of improving sustainable management of this ecologically important ecosystem and examined social and community values.
- The Forest Practices Board released its response to the April 2007 complaint (above). The Board issued six recommendations under two categories.

#### Interior Rainforest and Rare Lichens

- 1. The Ministry of Forests and Range, Ministry of Environment and the Integrated Land Management Bureau should formulate an overall stewardship strategy for the interior rainforest to ensure that biodiversity values are adequately managed and conserved.
- 2. The Minister of Forests and Range should examine the UNBC research and the ILMB Legacy Project reports to identify vulnerable interior rainforest stands in the Robson Valley and Prince George TSAs and the risk to such values from harvesting. Once areas are identified as vulnerable and at risk, the Minister should designate those areas under Part 13 of the Forest Act and suspend, vary or refuse to issue cutting

- permits and other timber harvesting plans for up to ten years.
- 3. The Regional Executive Director of ILMB should provide the Board with a copy of the decision on whether to establish spatial OGMAs, upon the completion of the Legacy Project. The document should incorporate a rationale for the decision including the factors considered and how values and risks were identified and addressed.

#### **Driscoll Ridge and Ancient Forest Hiking Trails**

- 4. The Minister of Tourism, Sport and the Arts [MTCA] should establish the Driscoll Ridge Trail and the Ancient Forest Trail as recreation trails under section 56(1) of the Forest and Range Practices Act.
- 5. The Minister of Tourism, Sport and the Arts should consider setting legal objectives for each of the trails as empowered by section 56(3) of the Forest and Range Practices Act.
- 6. The Minister of Tourism, Sport and the Arts should consider designating the Ancient Forest hiking trail as an interpretative forest site as empowered by section 56(1) of Forest and Range Practices Act.

Biodiversity in the Interior Cedar-Hemlock Forests Near Dome Creek (May 2008) http://www.fpb.gov.bc.ca/assets/0/114/178/298/ 356/076bb86e-6c4e-4273-bc05-d6e1b8d38e7e.pdf

• On November 19, 2008, a Recreation Order (#149) was issued to establish Driscoll Ridge Trail as a Recreation Trail and the Ancient Forest hiking trail as an Interpretive Site (managed through section 16 of the Forest Recreation Regulation).

#### 2009

- Important academic paper published that details the diversity of the inland rainforest: Radies, D.N., D.S. Coxson, C.J. Johnson, and K. Konwicki. 2009. "Predicting canopy macrolichen diversity and abundance within old-growth inland temperate rainforests." Forest Ecology and Management 259: 86-97.
- Both the Government of BC and the Forest Practices Board released an exchange of replies and responses related to the six recommendations issued by the FPB in response to the complaint filed in 2007. The following

highlights key statements from each document.

Government response to recommendation 1 (May 8, 2009)

http://www.fpb.gov.bc.ca/assets/0/114/178/298/356/c164fcab-f5df-4f55-8516-b26310060a07.PDF

"Work by various government agencies over the past decade has contributed to an overall stewardship strategy for the ICH area in the Prince George Forest District."

Government response to recommendation 2 (May 15, 2009)

http://www.fpb.gov.bc.ca/assets/0/114/178/298/356/c164fcab-f5df-4f55-8516-b26310060a07.PDF

"These two initiatives (Interior Rainforest Stewardship Strategy and Timber Supply Review), along with other provisions in the *Forest and Range Practices Act*, are the basis for resource management and conservation in the interior rainforest at this time. Therefore, the MFR will not be proceeding with a *Forest Act* – Part 13 designation."

Government response to recommendation 3 (April 30, 2009)

http://www.fpb.gov.bc.ca/assets/0/114/178/298/356/e9033c89-663e-46df-a626-3c9eaa3208e9.PDF

Existing initiatives "adequately manages the risk to biodiversity in the ICH zone...ILMB staff will continue to monitor the spatially identified old growth areas within the Guidance document. In the longer term, [ILMB] will consider any future analysis to determine if further spatial designation would be appropriate."

Board response to Government, re: recommendation 3 (Aug. 2009)

http://www.fpb.gov.bc.ca/assets/0/114/178/298/356/628346a6-ff44-4279-ab40-6b4ee085055d.pdf

"The Board concluded that there were inherent weaknesses in the reliance on guidance alone. To be effective, the reliance on professionals needs to be based on a clear planning framework supported by legislation. I accept that ILMB intends to monitor the draft OGMAs. As the guidance policy is non-binding and the monitoring would only show

damage after the fact, our concern is that the ICH values represented in the draft OGMA's are now rare and cannot be recovered if lost...When a sensitivity analysis is completed by the chief forester, I would expect that it would be appropriate to consider taking the opportunity to reconsider the spatial designation of the draft OGMAs."

Board response to Government, re: recommendation 1 (Aug. 2009)

http://www.fpb.gov.bc.ca/assets/0/114/178/298/356/12ab17ab-0683-4662-9f79-739389b729a3.pdf

"The Board is concerned that the guidance policy is not legally enforceable. Licensees may disregard it and still be in compliance with the Forest and Range Practices Act and meet the requirements of the 2004 biodiversity order. Government's stewardship strategy has stopped short of using the available legislative tools to ensure certainty of conservation of the ICH forests in this area. Vulnerable forest stands can still be legally harvested despite clear guidance to the contrary. A guidance policy approach would seem reasonable for values that have widespread occurrence and that can be managed through general application of practices across the landscape. The old growth or ancient cedar stands that are the subject of the draft OGMAS are, however, rare on the landscape, precisely located, small in total extent and essentially irreplaceable. For such values the stronger measures provided for in legislation appear to be necessary and could be invoked with better effect prior to discovering that the guidance is not being followed, not afterwards. For this reason, I conclude that the recommendation has not been met."

Board response to Government, re: recommendation 2 (Aug. 2009)

http://www.fpb.gov.bc.ca/assets/0/114/178/298/356/12ab17ab-0683-4662-9f79-739389b729a3.pdf

"I understand that the 4,770 hectares of draft OGMAs are not reflected as current practice in the base case timber supply scenario; even though the guidance policy has now identified the vulnerable interior rainforest stands. In the Board's view the ILMB guidance policy should be considered current practice and reflected in the base case analysis. Without the sensitivity analysis, the continuation of

the cedar/hemlock partition and its impact on the ICH forests and timber supply will be unknown and the chief forester may not have the information necessary to consider both the ICH resource values and the impacts of the partition in the impending AAC determination. For this reason, I find the ministry response to the recommendation to be inadequate.

"Under section 132 of the Forest and Range Practices Act, the Board requests that the chief forester prepare, for the Minister of Forests, a Part 13 designation under the Forest Act for the 4, 770 hectares of draft OGMAs identified in the policy guidance until such time that the sensitivity analysis is done. The Board requests that the chief forester notify the Board of the steps taken to implement the Board's recommendations by February 1, 2010.

"In conclusion, I note with appreciation that government staff have prepared a thorough analysis and stewardship strategy that does identify vulnerable interior rainforest stands. However, in the Board's view the government's response is not adequate to ensure effective management and conservation of the significant biodiversity values in this case and could be significantly improved by use of existing legislative tools."

Board response to Government (MTCA), re: recommendations 4, 5, and 6 (April 14, 2009) http://www.fpb.gov.bc.ca/assets/0/114/178/298/356/d76c43ec-5527-4a7b-93d8-1bfaa28b6936.pdf

"recommendations 4 and 6 have been satisfactorily met."

"In considering the adequacy of MTCA's response to the Board recommendations, I examined three factors that influence the risks to the integrity of the ancient cedar stands if MTCA does not establish, or delays establishing, objectives for the Driscoll Ridge trail and the Driscoll Ancient Forest Interpretative Site. I conclude that the establishment of the trail and site under section 56 of FRPA does provide some level of protection. Once established, Section 16 of the Forest Recreation Regulation requires authorization of the use of a recreation site, trail or interpretive forest site for a business or industrial activity. This authorization from MTCA should be noted by other ministries as a requirement. I also conclude that the Ministerial Order

provides protection to the interpretative site but not the Driscoll Ridge trail.

"However, I do not yet consider the response to recommendation 5, that MTCA establish objectives for the site and trails, to be adequate. Nevertheless, MTCA has identified a greater need to establish objectives throughout the district and this is beyond what the Board recommended. I commend the ministry for this recognition and so will extend the deadline for our recommendation. In addition, I expect that MTCA could establish objectives throughout the district in stages. That is, first address high risk areas and ensure that the objectives are established expeditiously, and then establish objectives on less urgent sites and trails in sequence.

"Under section 132 of the Forest and Range Practices Act, the Board requests that the Ministry of Tourism, Culture and the Arts, notify the Board of the steps taken to implement the Board's recommendations by May 3, 2010."

- In February, Additions to Ungulate Winter Range core habitat for Mountain Caribou were approved.
- In February 2009, an Order from the Ministry of Agriculture and Lands established a 57 ha OGMA surrounding and including the Ancient Forest Trail.

#### Websites of interest

#### Research

- Non-timber uses and values project www.unbc.ca/planning/ancient\_cedar/index.html
- Northern Wetbelt Forests of BC http://wetbelt.unbc.ca

Non-profit organisations

- Ancient Cedar www.ancientcedar.ca
- Save The Cedar League www.savethecedarleague.org
- Fraser Headwaters Alliance http://www.fraserheadwaters.org/inlandrainforest.html

#### Land management

- Integrated Land Management Bureau http://www.ilmb.gov.bc.ca
- Forest Practices Board www.fpb.gov.bc.ca