

AUSTRALIA

Nothing's going on?? I doubt that ☺. I'll try harder to get some information for the next newsletter

CANADA

Publications

Christianson, A., McGee, T., and L. L'Hirondelle. 2012. **How Historic and Current Wildfire Experiences in an Aboriginal Community Influence Mitigation Preferences.** *International Journal of Wildland Fire*. Online Early. A-J

Christianson, A., McGee, T., and L. L'Hirondelle (2012) **Community Support for Wildfire Mitigation at Peavine Métis Settlement, Alberta, Canada.** *Environmental Hazards: Human and Policy Dimensions*. 11(3). 177-193

Krishnaswamy, A.; Simmons, E.; Joseph, L. 2012. **Increasing the Resilience of British Columbia's Rural Communities to Natural Disturbances and Climate Change.** *BC Journal of Ecosystems and Management* 13(1): 1-15

Langlois, B., Caverley, N., Krishnaswamy, A., MacGregor, J., and J.B. Cunningham. 2012. **Safeguarding our Indigenous Communities: Measuring the health and safety culture of Aboriginal fire crews and emergency service personnel in British Columbia.**
http://www.worksafebc.com/contact_us/research/funding_decisions/assets/pdf/2012/RS2010-IG38.pdf

On the Ground

First Nations Emergency Services Society (FNESS) update:

1. Communities who completed Community Wildfire Protection Plans (CWPPs)

- Lake Babine Nation – Pinkut/Donald
- Tsay Keh Dene Band
- Cheam First Nation
- Haisla Village Council
- Matsqui First Nation
- Mowachaht/Muchalaht First Nation
- Soowahlie Indian Band
- Sumas First Nation
- Osoyoos Indian Band
- Penticton Indian Band

Prescriptions submitted

- Siska Indian Band
- Nicomen Indian Band

OT Projects Completed

- Coldwater Indian Band
- Nadleh Whut'en Band
- Shuswap Band
- Nooaitch Indian Band

2. Aboriginal Training for Employment Project – initiated with the Lillooet Tribal Council Bands.
 - 22 trainees
 - 15 found short-term employment
3. A meeting was held in Victoria to progress the coordinated approach to fuel management both on- and off-reserve, which included Canada, the Province and FNESS. Priority is given to securing continued funding across the landscape/land jurisdictions.
4. There has been activity on the *FireSmart* front, with three bands participating in the National Recognition Program, with assessments completed:
 - *Whispering Pines/Clinton Indian Band –the Pellt'iq't People*
 - *Coldwater Indian Band*
 - *Tk'emlúps te Secwepemc*
5. Staff participated in a field test for a newly developed mobile remote sensing application, which conducts forest fuel wildfire threat assessments. The application is currently under development.

Past Conferences

Wildland Fire Canada 2012

Kananaskis Country

Oct 2 to 5 2012

This year's conference had an increased focus on the role of Aboriginal burning practices in shaping the landscape of Canadian forests. One of the keynote speakers was Johnny Stowe from the South Carolina Department of Natural Resources. Johnny spoke about 'Fire in the Southland: The Natural and Cultural Heritage of Fire in the Southeastern United States'. Another interesting keynote talk was by Cliff White of the Canadian Rockies Bison Restoration Initiative, titled 'From Bingo Burns to Bison Corridors: Ecologically and Spatially Integrated Fire Management in Banff and the Yellowstone to Yukon (Y2Y) Corridor'. Other talks that may be of interest include:

- *'Historic Fire Regimes in the Kananaskis Valley'. Brad Hawkes, Canadian Forest Service*
- *'British Columbia's Ecosystem Restoration Program – 'Playing with Fire'' – Al Neal, British Columbia Ministry of Forests, Lands and Natural Resource Operations*
- *"Historical Ecology and Changes in Burn Probability of the Southern Alberta Rocky Mountains, AD 1900-2010' – Chris Stockdale, University of Alberta, Department of Renewable Resources*
- *'The Challenge of Collaboration between Indigenous and non-Indigenous People in the Context of Wildfire' – Noemie Gonzalez, Universite Laval*

Current Research

Alberta's Aboriginal Wildland Firefighters: A Proud History and an Uncertain Future

PI: Amy Christianson (Canadian Forest Service)

Start date: June 2012

End date: June 2013

The goal of the research is to explore the role of firefighting in building human capacity in Aboriginal communities to reduce wildfire risk. The specific objectives of the research are:

- 1) to determine why Aboriginal people in Alberta are seeking employment in firefighting;*
- 2) to explore the roles of traditional and contemporary knowledge among Aboriginal firefighters in regards to fire behaviour, firefighting techniques, and mitigation activities;*
- 3) to explore if Aboriginal firefighters are interested in leading wildfire mitigation activities in their own communities; and*
- 4) to determine interest in being employed by year-round Aboriginal wildfire management businesses.*

Turning Seasonal Firefighting Employment into Career Opportunities for Aboriginal Firefighters

PI: Amy Christianson (Canadian Forest Service)

Facilitator: Lorne L'Hirondelle

Start date: January 2013

End date: June 2013?

This project will build on research conducted this summer with seasonal Aboriginal firefighters in the province of Alberta on their interest in year-round employment. This qualitative social science research project will examine opportunities, obstacles, and constraints to the year-round employment of Aboriginal firefighters, from the perspective of various stakeholders. Aboriginal employees could move from typical short-term seasonal firefighting employment to year round long-term sustainable employment. These crews could address:

- (1) needs expressed in the Flat Top Complex Wildfire Review Final Report, such as providing labour on FireSmart projects and having experienced crews to respond to early spring fires,*
- (2) handling fire suppression in the Wildland-Urban Interface (WUI) as crews could also be trained in structural firefighting, making them specialized fire crews that could potentially be exported nationally and internationally, and*
- (3) wildfire management concerns on reserves, as the crews could also spend some of the off-season travelling around to reserves in the province, speaking at both schools and to reserve and Tribal Councils on wildfire management.*

Return to Flame: Resurgence of Aboriginal fire use in the vicinity of Lytton, British Columbia

PI: Michael Lewis (University of New Brunswick)

Supervisors: Amy Christianson, Thomas Beckley

Start date: May 2012

End date: August 2013?

The intent of this report lies in answering the following question: in the light of policy regression, to what extent have the traditional Nlaka'pamux lands seen a return to Aboriginal, anthropogenic fire use as a tool? To accomplish this, tribal Elders and governance of the Lytton First Nation (LFN) were invited to a series of

round-table discussions on the historical record of Aboriginal fire use in the region with a focus on qualitative data collected via personal narratives. The data collected will be ultimately used to determine to what degree these Aboriginal groups have resumed utilization of anthropogenic fire as a management tool.

The Challenge of Collaboration Between Indigenous and Non-Indigenous People in the Context of Wildfire

PI: Noémie Gonzalez (Université Laval)

This study focuses on one fire that occurred on the Atikamekw First Nation's ancestral territory – Nitaskinan – close to the Wemotaci reservation. The fire was managed over a ten day period of firefighting. During this period, there were several switches between collaboration and non-collaboration situations between professional forest firefighters and volunteers from the Atikamekw community. This study combines the results of a literature review, an analysis of media coverage of the emergency, as well as ethnographic interviews conducted with different actors of the wildfire event, in order to assess the types of collaboration and non-collaboration that took place between Indigenous and non-Indigenous people in the context of wildfire.

Upcoming Research

The Aboriginal Wildfire Evacuation (AWE) Partnership

Funded by: Pending

PIs: Tara McGee (University of Alberta) and Amy Christianson (Canadian Forest Service)

Partners:

- Deer Lake First Nation *Contact: Howard Meekis – Crisis Coordinator*
- Dene Tha First Nation *Contact: Chief James Ahnassay*
- Driftpile Cree Nation *Contact: Chief Rose Laboucan*
- Mishkeegogamang Ojibway First Nation *Contact: Chief Connie Gray-McKay*
- Onion Lake Cree Nation *Contact: Hubert Pahtayken Fire Rescue & Peacekeepers*
- Whitefish (Atikameg) First Nation *Contact: Chief Tallman*
- Fran Byers Alberta *Emergency Management Agency*
- Carla Dee Bellanger *Saskatchewan Ministry of Government Relations, Saskatchewan Emergency Management Organization*
- Carl Friske *Saskatchewan Ministry of Government Relations, Emergency Management & Fire Safety*
- Larry Fremont *Saskatchewan Ministry of Environment*
- Garnet Matchett *Saskatchewan Ministry of Health, Health Emergency Management Unit*
- Linda Korney, *Saskatchewan Ministry of Social Services*
- Rob McAlpine, *Ontario Ministry of Natural Resources, Response and Operations*
- Aadu Pilt, *Emergency Management Ontario*
- David Diabo, *Assembly of First Nations, Emergency Issues Management*
- Wadieh Yacoub and Wojciech Drobina *Health Canada*
- Dianne Carlson and Michelle Ring *Aboriginal Affairs and Northern Development Canada*
- Cameron Challenger, *First Nations Emergency Services Society*
- Douglas Paton, *University of Tasmania*

Start date: May 2013

End date: May 2016

The aim of this research is to bring together researchers, Aboriginal communities, and agencies involved in wildfire evacuations to examine how Aboriginal residents and communities are affected by wildfire evacuation. The objectives are to: (1) Document how Aboriginal residents and communities were affected by recent wildfire evacuations; (2) Identify characteristics of the wildfire evacuation that influenced how residents were positively and negatively affected by the evacuations; (3) Identify what characteristics of individuals, their social context, and the Aboriginal communities affected how residents were positively or negatively affected by the wildfire evacuation; and (4) Identify ways to reduce the negative impacts or wildfire evacuations on Aboriginal peoples.

We will be looking for one MA student and one PhD student to start at the University of Alberta September 2013 for this project, under the supervision of Dr. Tara McGee. If you are interested or know of any suitable candidates, please email Amy.Christianson@nrcan.gc.ca

NEW ZEALAND

Publications

This publication is not specifically focused on an Indigenous community but may be of interest: Jakes, P., Langer, E.R. (2012). **The adaptive capacity of New Zealand communities to wildfire.** *International Journal of Wildland Fire* 21 (6): 764–772.

Upcoming Research

Māori intern student, Grace Stone, under the supervision of Lisa Langer with Scion.

The project aims to gain an understanding of the following within a case study area:

- *Traditional Māori use of fire;*
- *Māori use of fire in rural areas and rural communities (heating, cooking including hangi, land clearing, and recreation (e.g. hunting and food gathering - mahinga kai);*
- *How fire is regarded and used by Māori today as a tool in the rural landscape and rural communities, including use of fire as a land management tool for food crops, e.g. clearance for kumara beds;*
- *Māori perceptions of fire as a natural hazard/risk.*

UNITED STATES OF AMERICA

Publications

Coughlan, M.R.; and A.M. Petty. 2012. **Linking humans and fire: a proposal for a transdisciplinary fire ecology.** *International Journal of Wildland Fire*. Online First: A-K

Mason, Larry, Germaine White, Gary Morishima, Ernesto Alvarado, Louise Andrew, Fred Clark, Mike Durglo Sr., Jim Durglo, John Eneas, Jim Erickson, Margaret Friedlander, Kathy Hamel, Colin Hardy, Tony Harwood, Faline Haven, Everett Isaac, Laurel James, Robert Kenning, Adrian Leighton, Pat Pierre, Carol Raish, Bodie Shaw, Steven Smallsalmon, Vernon Stearns, Howard Teasley, Matt Weingart, and Spus Wilder. 2012. **Listening and Learning from Traditional Knowledge and Western Science: A Dialogue on Contemporary Challenges of Forest Health and Wildfire.** *Journal of Forestry*. June 2012: 187-193

Ray, Lily A., Kolden, Crystal A., and E. Stuart Chapin III. 2012. **A case for developing place-based fire management strategies from traditional ecological knowledge.** *Ecology and Society* 17 (3): 37

Workshops

Traditional Knowledge and Fire Workshop:

Returning Fire to the Land: Celebrating Traditional Knowledge and Fire
November 7-9, 2012 Pablo Montana

The Northern Rockies Fire Science Network, Salish Kootenai College, University of Idaho, and Confederated Salish and Kootenai Tribes were pleased to host a workshop aimed at integrating traditional knowledge and scientific ecological knowledge into fire management

Upcoming Conferences/Meetings

5th International Fire Ecology and Management Congress: Uniting Research, Education, and Management Association of Fire Ecology, Oregon Convention Center, Portland, December 3-7, 2012

There is a session on Tues. afternoon that Don Hankins and Frank Lake co-organized on Indigenous Fires and Land Management Practices. Join them in Room B118 from 1:15 to 4:35 pm. Talk include:

- *Incorporating indigenous community values for natural and cultural resources into research and wildland fire management—a western North American perspective. – Frank Lake*
- *Traditional fire management: historical fire regimes and land use change in pastoral East Africa – Ramona Butz*
- *Aboriginal Australians as trophic regulators: fire, hunting, and small mammal extinctions in the Western Desert of Australia – Douglas Bird*
- *Fire, biodiversity, and cover in the Kaanju Ngaachi Indigenous Protected Area – Don Hawkins*
- *Mapping the emergence of indigenous fire ecologies, sociality and self – Cissy Fowler*

Researchers, managers, and tribal people working on TEK and indigenous fire issues are invited to a lunch on Wed. Dec. 5. Contact Frank Lake or Don Hankins for more details.

Current Research

Incorporating tribal TEK for Climate Change Adaptation and Mitigation Strategies

PI: Frank Lake

How are indigenous communities working with researchers and managers regarding wildland fires (wild and Rx), incorporating tribal TEK for Climate Change adaptation and mitigation strategies?. This topic seems to be a “hot” one now with little published research. The North Pacific Landscape Conservation Cooperative has a Science/TEK sub-committee. The Joint Fire Science Consortiums in different regions are reaching out to tribes/indigenous communities in the US. I wonder if this is happening in other regions/countries?

BIOS OF SOME MAILING LISTERS

Christine Eriksen PhD FRGS (Australia, USA, Europe)

- Social Geographer in the Australian Centre for Cultural Environmental Research at the University of Wollongong, Australia
- Research interests: (1) The role and place of local environmental knowledge in building resilience to natural hazards and maintaining sustainable land management practices, (2) Gendered dimensions of wildfire risk engagement and risk resilience
- Current Projects: (1) Gender and wildfire at the wildland-urban interface, (2) Indigenous fire knowledge retention, (3) Co-existing with fire: managing risk and amenity at the rural-urban interface, and (4) What does being ‘well-prepared’ for bushfire mean?
- More info: <http://www.uow.edu.au/science/eesc/eescresearchacademics/UOW073400.html>

Lisa Langer (Christchurch, New Zealand)

- Social Science Researcher
- Leader - Scion's social fire research
- Interests: (1) community resilience and recovery following wildfire, (2) fire danger warning communication, (3) fire insurance, and (4) mitigating the risk of human caused wildfires
- Current Projects: Enhancing community resilience and Effective communication: Communities and Rural Fire.
- More info: <http://www.scionresearch.com/general/about-us/our-people/people/sd/lisa-langer>

Amy Christianson PhD (Edmonton, Alberta, Canada)

- Fire Social Scientist
- Canadian Forest Service
- Natural Resources Canada
- Interests: Indigenous communities (particularly Canadian Aboriginal communities) and all aspects of wildfire management
- Current Projects: (1) Improving wildfire evacuations of Aboriginal communities, (2) Aboriginal Wildfire Management Businesses, (3) Aboriginal children perceptions of fire, (4) Contemporary Aboriginal Firefighters as Leaders in Community Wildfire Mitigation, and (5) Retention of Traditional Burning Knowledge in Canada and Current Applications to Wildfire Management
- More info: <http://cfs.nrcan.gc.ca/employees/read/amchrist> ,
http://research.eas.ualberta.ca/hdhresearch/research_group.html

Matt Carroll PhD (Pullman, Washington State, USA)

- Professor, Department of Natural Resource Sciences, Washington State University
- Former co-editor in chief for SNR
- Co editor on one and contributor to another on 2 edited books on the human dimensions of wildfire
- Interests: Human response to both the threat and reality of uncontrolled fire in the residential/forest interface as well as other social issues around controlled and uncontrolled wild-land fire.
- Current Projects: Working on National Fire plan, NSF and NASA projects looking at adaptive capacity in fire prone human communities and response to large catastrophic
- More info: <http://nrs.wsu.edu/people/faculty/carroll.html>

Ernesto Alvarado PhD (Seattle, Washington State, USA)

- Research Associate Professor
- Pacific Wildland Fire Sciences Laboratory, School of Forest Resources
- University of Washington
- Interests: Fire behavior, biomass combustion, fire ecology, fire management, prescribed fire, smoke emissions, fire-climate change interactions, tropical forestry, landscape ecology, international forestry, emissions of greenhouse gases, policy, statistical modeling, and traditional fire use by indigenous communities.
- Current Projects: My research includes studies on Tribal and Federal lands throughout the US including Alaska, Biosphere Reserves in Mexico, Brazilian Amazon forest, and tropical forest in Bolivia

Some of the projects I work on:

- Wildland Fuel and Fire Management in a Changing Climate-
- Educating Forestry Leaders and Scientists from Underrepresented Communities
- Fire, Climate, and Smoke Research
- Community decision making at the Monarch Butterfly Biosphere Reserve in Mexico
- Fire management in Mexico's Protected areas
- Biomass combustion and smoke emissions in the Amazon forest in Brazil
- Use of fire to restore forest health of watersheds affected by fire suppression: a comparison between federal and tribal lands.
- Community fire management in indigenous and non-indigenous communities in Bolivia

Don Hankins PhD (Chico, California, USA)

- Assistant Professor in Geography and Planning
- California State University, Chico
- Current Projects: (1) Working with tribal youth and tribal governments to re-establish traditional land and water management activities within a scientific framework, (2) Engaging undergraduate and graduate students in applied fire research projects, (3) Integration of traditional ecological knowledge with the discipline of fire ecology in the form of the pyrogeography course I developed, and (4) Assisting agencies and non-governmental organizations in planning and implementing fire monitoring.
- More info: <https://fresca.calstate.edu/faculty/1637> ,
http://www.csuchico.edu/pub/inside/07_12_06/burn.shtml

Natasha Caverley PhD (North Saanich, British Columbia, Canada)

- Organizational Behaviour Researcher and Practitioner
- Turtle Island Consulting Services Inc.
- Interests: organizational behaviour; human resource management (includes occupational health and safety/health and well-being); cross-cultural/community facilitation
- Current Projects: occupational health and safety culture research of BC Aboriginal firefighters and emergency responders (First Nations' Emergency Services Society); forest stewardship resource planning (Algonquins of Ontario); strategic organizational planning (Tribal Resources Investment Corporation; Aboriginal Business Service Network); climate change and adaptation research in the South Selkirks region of BC (University of British Columbia)
- More info: www.turtleislandconsulting.ca

Rob McAlpine (Sault Ste Marie, Ontario, Canada)

- General Manager, Response and Operations
- Ontario Ministry of Natural Resources
- Interests: (1) Improving Aboriginal community evacuations, (2) understanding and mitigating negative impacts of evacuations, (3) improving remote community resilience to disaster impacts, and (4) all things fire management
- Current Projects: Too many to list
- More info: Ph:705-945-5978

Lorne L'Hirondelle (Peavine Métis Settlement, Alberta, Canada)

- Wildland Firefighter
- Former Forestry Coordinator
- Peavine Métis Settlement

Thomas Blank (Kamloops, British Columbia, Canada)

- Forest Fuel Management Coordinator
- First Nations Emergency Services Society

Brent Langlois (Kamloops, British Columbia, Canada)

- Coordinator, Special Operations, Forest Fuel Management
- First Nations Emergency Services Society