

Van Tat Gwich'in Navigation Systems Project

**2012 Research
Year-End
Report
March 2013**



Van Tat Gwich'in Navigation Systems Project



Looking from Ch'ichèechih/Schaeffer Mountain across Chyàh Njik/Crow River valley toward Chyàh Ddhàa/Second Mountain

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Cover photo: Moose leaving Stephen Frost's camp,
Van Tat/Crow Flats

Photographs are S.Smith@VGFN unless
otherwise indicated.

Van Tat Gwich'in Navigation Systems Project

1. Introduction to the Project

Parks Canada Agency Research & Collection Permit
VUN-2012-11434A

Polar Continental Shelf Project 391-12

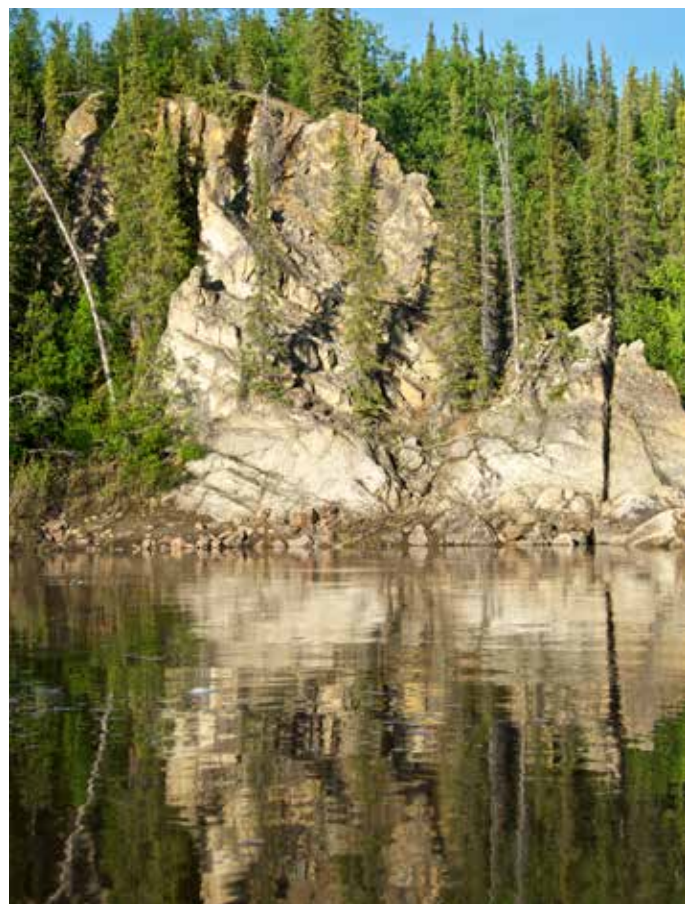
Yukon Scientists & Explorers License 12-22 S&E

Yukon Archaeological Sites Regulations Permit 12-13ASR

In 2011, the Vuntut Gwitchin Government Heritage Branch embarked on the Van Tat Gwich'in Navigation Systems Project. The main impetus for the research is twofold: to document the knowledge held by current elders and resource users about their current and heritage navigation systems, including seasonal land and water-based routes, and modes of travel; and to promote the use and transfer of this knowledge by revitalizing select trails, erecting place name signs in Gwich'in and English at significant locations, and actively involving future resource users and leaders in the research. The project addresses the need for background information for the over 800 place names in the VGG Place name Database, and further research on graves and burial sites, their location in the traditional territory and individuals associated with them.

The VTG Navigation Systems Project continues the practice of collaborating with academics and other researchers to expand the knowledge base about traditional Gwich'in history and lands, while involving Van Tat Gwich'in to promote knowledge and research skills.

The project hinges on the recognition of the central



Lower Chyàh Njik/Crow River

Van Tat Gwich'in Navigation Systems Project Objectives

- document past and current navigation routes
- erect Gwich'in/English place name signs
- revitalize select trails
- document background Gwich'in place name information
- document and locate graves and burial sites
- train and educate Van Tat Gwich'in participants
- collaborate with academics and other researchers
- communicate and educate through reporting, interpretive materials and programs, on-the-land signage, GPS information, and navigation route revitalization.

Van Tat Gwich'in Navigation Systems Project



Chyàh Njik/Crow River



Elder Irwin Linklater at the lake near his camp on Chyàh Njik

importance of travel on the land to Van Tat Gwich'in history and culture. Navigation systems linked camps, villages, hunting and trapping areas, trading networks, portage routes, fishing sites, and routes to other Gwich'in and non-Gwich'in settlements – all important parts of life on the land and cultural continuity. Patterns of movement and livelihood have changed at various times in the past and fluctuated depending on resources, technology and events, but the need for knowledge of these networks and systems retains its importance.

The VTG Navigation Systems Project is undertaken at this time because of the availability of Elders who know the routes and are physically capable of taking part in the project, and young adults with back-country and navigation experience who are keen to expand their knowledge of navigation routes and their cultural history.

As well, the project is committed to training and transmission of project information to Van Tat Gwich'in and the general public.

2. 2012 Research

2012 research was focussed in the Van Tat/Crow Flats area, as well as access and routes north across the divide to the North Slope (Arctic drainage). Van Tat is the heartland of the Van Tat Gwich'in and the area was used intensively throughout Gwich'in history. Research in Van Tat/Crow Flats was approached along Chyàh Njik/Crow River by boat and among the lakes and nearby hills by helicopter. In addition, one undocumented route from Van Tat to Chii T'eh/Firth River was recorded, and additional reconnaissance was undertaken on the Vihsraiinjik/Cody Creek trail to Chuu Tl'it/Whitstone Village, a trail that saw revitalization work as far as Ch'iidrii Ddhàa/Heart Mountain in the summer of 2011 and spring (February) of 2012.

In summer 2012, we undertook two separate research efforts in the Van Tat area: a boat survey in June and a helicopter survey in July.

a) Chyàh Njik/Crow River boat survey

In June, four boats travelled up Chyàh Njik/Crow River recording the locations of camps, portages, trailheads and significant physical features as far as Ts'iivii Shùhnjik/Timber Creek, and mapped and marked locations for subsequent signage. Dense willows lining the river created some challenges for locating trailheads and camps, and to brush-out markers.

The research party established a camp at Irwin Linklater's campsite upstream from Neegoo Zràii Njik/Black Fox Creek, a location shared with a research team headed by Jeremy Bramer, biologists conducting a multi-year study of factors affecting muskrat production in Van Tat. At the camp, the Navigation Systems Project research team conducted interviews on the many locations and routes documented on the trip.

While travelling Chyàh Njik/Crow River, team members took note of water levels, vegetation and wildlife conditions such as kinds and quantities of migratory waterfowl and mammals, observations which were later correlated with those of biologist David Mossop who, with VG assistants, was conducting a bird survey at nearby K'ii Zhit/Schaeffer Lake and Vakak Taiithini/Drown Lake, a longitudinal study following up his research in the 1970s.



Research team on Ch'ich'èechih /Schaeffer Mountain..
Pilot Zac Dippe, John Joseph Kaye, Danny Kassi & Irwin Linklater

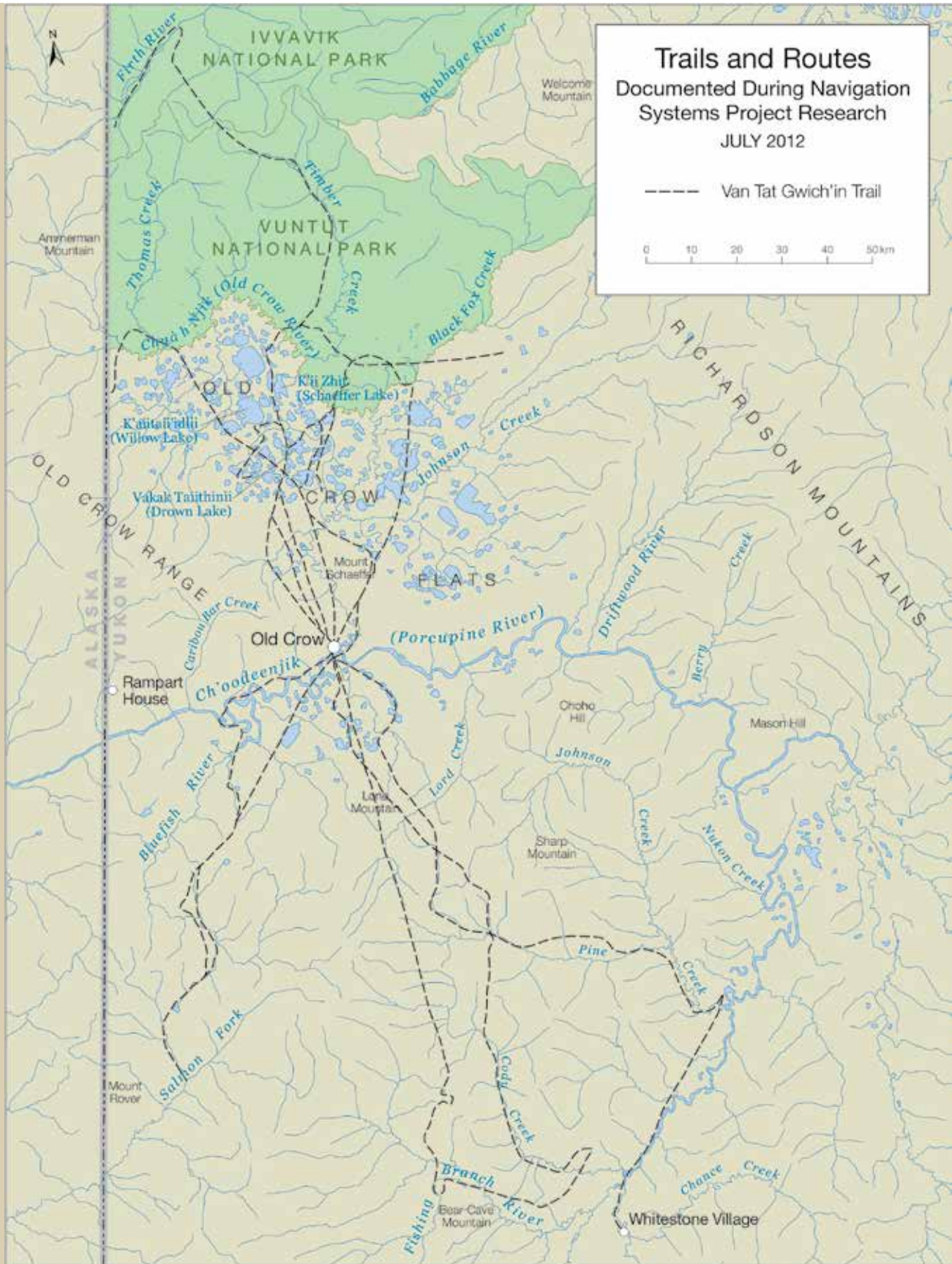


Chii Ch'ank'it/Canyon sign place



David Frost and Esau Schafer at Ch'iidrii Ddhàa/Heart Mountain

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Map 1. Trails and routes documented during Navigation Systems Project research, June-July 2012

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b) Aerial survey

In July, the project conducted 6 days of helicopter-assisted survey. This access enabled the project to document trails and routes to the Van Tat area and further north, south from Old Crow to Zhoh Drin Chòo/White Snow Mountain, Ch'odeenjik/Porcupine River to Bluefish Lake, and the southern segment of the Vihsrainjik/Cody Creek trail to Chuu Tl'it/Whitestone Village. As well, research ground-truthed accurate locations for a number of places (lakes, camps, trails, features) in the Van Tat area.

During the helicopter survey, the project collaborated with researchers archaeologist Ray Le Blanc, studying sites in the Salmon Fork and Driftwood River areas, and biologist David Mossop, conducting a bird survey in the K'ii Zhit/Schaeffer Lake area.

While researching specific trails and routes, the research team installed Gwich'in/English signage at various places inaccessible by boat, such as along the Vihsrainjik trail. Signage in these locations is intended to assist with navigation, cultural and historic interpretation, and Gwich'in language promotion.

In addition to field research, VGG Heritage collaborated with the Gwich'in Social Cultural Institute in the NWT to examine their oral history collections for information about Gwich'in travel over the Richardson Mountains, and produced the report: Gwich'in Social and Cultural Institute 2012, "Teet'it Gwich'in, Gwichya Gwich'in, and Ehdiitat Gwich'in Journeys to Old Crow: Oral History about Trails, Meeting Places, and Diverse Travels."

During autumn and winter 2012-2013, the project accomplished a number of tasks:

- data processing (translation, transcription, indexing, duplication, database entry, cataloguing, reporting)
- specialized GPS training
- wilderness first aid course
- 2013 research planning
- production, editing and testing of Tr'ahtsii/How-to-Make Manuals (part of communicating project information)
- secure funding for 2013 research



David Frost and Lance Nagwan erect a sign on the Chuu Tl'it/Whitestone Village trail at Vadzaih Gwiinzheii/Caribou Mountain.



Stephen Frost Sr. and Robert Bruce Jr. recording navigation and cultural information at the fish hole site at Chii T'eh/Firth River



Interviews at Irwin Linklater's camp, Van Tat. L-R, Robert Bruce Jr., David Lord and filmer Malinda Bruce.



David Frost, Esau Schafer and pilot Zac Dipppo on Chii Ch'a'an/Bear Cave Mountain



Malinda Bruce filming Jane Montgomery and Stephen Frost at mountain south of Useful Lake



Heritage Researcher Mary Jane Moses copying and duplicating interview recordings prior to translating and transcribing.

3. 2012 Results & Products

In 2012, we conducted river-based research, extensive overflights and verifications of trail systems, installed Gwich'in/English signage, conducted interviews, collaborated with academic researchers, and delivered a training and education program. We collected GPS data, digital video, audio and photographs. In the course of our research activities, we incorporated youth, elders, resource people, and people with a variety of skills in a learning environment.

1. Results - data

Data collection in 2012 began in spring with 3 preliminary interviews with Elders and other knowledgeable about trails, routes, and history of travel in Van Tat/Crow Flats. Along with mapping and linguistic research to verify place name orthography, these interviews laid the groundwork for field research.

Further interview data (17 interviews) and GPS locations were collected during river-based research on sites along Chyàh Njik/Crow River (camps, trailheads, portages, fishing places) and on trails in and around Van Tat.

Aerial research by helicopter enabled us to document a 11 trails, including a route that we had not investigated previously from the headwaters of Ts'iivii Shùhnjik/Timber Creek over the height of land to the headwaters of the Chii T'eh/Firth River. We recorded the main route from the Teechik/Old Crow area to Van Tat over Tsii'ideh/King Edward Ridge, as well as routes around the east side of Ch'ichèechih/Schaeffer Mountain, and trails used for overland travel from Van Tat lakes to Chyàh Njik/Crow River.

In addition, we built on research begun in 2011 by investigating the southern leg of the Vihsraiinjik/Cody Creek trail to Chuu Tl'it/Whitestone Village. This is the segment of the trail that remains to be revitalized, and the helicopter survey was to determine the best route following Vihsraiinjik.

In 2012, the project collaborated with archaeologist Ray Le Blanc and biologist Dave Mossop (see 4. Research Collaborations).

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Chyàh Njik/Crow River

2. Results - methods

2012 research continued some of the methods used in 2011. Both boats and aerial surveys were conducted. While there was less overland travel, the project focus remains on GPS, digital mapping and its applications. More specialized training is still an objective.

3. Results - products

Concrete products of 2012 research included:

- 20 new interviews (translated, transcribed)
- 130 GPS locations
- 11 GPS trails/routes
- 2496 photographs
- 51 place name signs in Gwich'in and English produced; 15 installed
- 3 Tr'ahtsii/How-to manuals: Aih/snowshoe (2nd edition), Tr'ih/canoe, and Gwich'in funerals (in progress)
- report: Gwich'in Social and Cultural Institute 2012, "Teet'it Gwich'in, Gwichya Gwich'in, and Ehditat Gwich'in Journeys to Old Crow: Oral History about Trails, Meeting Places, and Diverse Travels."
- 2 days archaeological survey, Salmon Fork River, King Edward Mountain and Driftwood River areas
- Interim and year-end project reports



Gwich'in/English place name signs at significant locations such as travel route landmarks.



As part of communication of results and utilizing research, VGG Heritage has produced a number of Tr'ahtsii or "How-to-make" manuals such as making canoes and snowshoes.

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Mountains between Ts'ivii Shuhnjik/Timber Creek and Chii T'eh/Firth River (white ribbon in distance)



(above) Archaeological artifact found at Troo Chòo Njik/Driftwood River (right) Bird's nest on Vakak Taiithini/Drown Lake (photos: Ray Le Blanc, Erin Linklater)



4. Research Collaborations

The Van Tat Gwich'in and VGG Heritage have long collaborated with academics and other researchers. Benefits to VGG have been both to increase the scope and depth of knowledge about Van Tat Gwich'in and VTG lands, and to expose community members to a wide variety of ways of knowledge, researchers and their techniques. Research has also contributed valuable insights to the broader society.

In 2012, VGG worked with archaeologist Ray Le Blanc and biologist Dave Mossop's. Both researchers' work in the northern Yukon goes back to the 1970s and provides valuable longitudinal data about changes and trends over time, as well as a history of successful collaboration with Van Tat Gwich'in.

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Archaeologist Ray Le Blanc examined locations in the Salmon Fork River area, Ch'anchàl/King Edward Mountain area, and Troo Chòo Njik/Driftwood River area and recorded two new archaeological sites and one found in 1999 but not previously registered. Sites varied from a single chert flake on Ch'anchàl/King Edward Mountain to a number of flakes, a core fragment and two side scrapers at Salmon Fork River, to microblade material with a possible buried component at a site on the upper Driftwood River. Dr. Le Blanc worked with Van Tat Gwich'in assistants Jeffrey Peter, Erin Linklater and Dougie Charlie.

Approximately 40 years ago, biologist Dave Mossop conducted research into bird populations in the K'ii Zhit/Schaeffer Lake and Vakak Taiithinii/Drown Lake areas. In his Interim Report* he described the impetus for his current research:

“In 2012 the Vuntut Gwitchin government requested and submitted funding proposals for a return to those earlier data sets to discover whether changes that local people on the land are reporting could be substantiated analytically. .. There was from the inception an objective for creating a legacy of science to integrate with the strong local knowledge of the Flats in Old Crow.”

His research examined changes in populations of bird and other riparian species (living along rivers and streams) as indicators of ecosystem changes, and included observations of plants and hydrological events. Initial results revealed the absence of three formerly abundant species (red-throated loon, greater scaup, long-tailed duck), other species at risk (surf scoter), an increase in abundance of Herring gulls, and, correlating with VGG observations, strong evidence that shrubs and spruce along rivers have accelerated in abundance and size. He recommends further ongoing research on water levels, bird breeding, plant cycles, and indicator species such as peregrine falcons. Dr. Mossop's assistants were Shannon Harvey, Chelsea Charlie, David Frost, Darcie Andre Josie, and Erin Linklater. **

*Mossop, D.H. 2012 The Crow Flats Wetland: Evidence of Changing Ecology

**Yukon News published an article about D. Mossop's 2012 research: <http://yukon-news.com/business/29263/>



Shannon Harvey and Dave Mossop conducting a bird survey on Vakak Taiithinii/Drown Lake (photo: Erin Linklater)



Archaeological survey: (above) Dougie Charlie at Troo Chòo Njik/Driftwood River; (below) Ray le Blanc at Drifting Snow Creek (photos: Ray Le Blanc, Erin Linklater)



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Ramparts upstream of Rampart House.



Chuu Tl'it/Whitestone Village



Kâachik/Johnson Creek Village

5. 2013 Research

In 2013, we will focus on 4 areas of research:

- **Upriver** In May 2013, while water levels in the river are high, we will travel up Ch'ooddeenjik/Porcupine River to concentrate on the stretch above our 2011 research, the Jałk'it and Ch'ijuhdlâii/Porcupine Lake area. The focus will be from Kâachik/Johnson Creek Village - a site we have been unable to access by air due to the dense brush that has grown there - to Chuu Tl'it/Whitestone Village. A system of trails connects these villages, and each has winter trails to the Old Crow area, as well as the LaPierre House site. We will conduct research, improve accessibility by removing brush, assess the sites, and record/map and install Gwich'in/English signage at significant locations along the river.
- **Downriver** In May/June, we will travel down Ch'ooddeenjik/Porcupine River to the Gindèhchik/Rampart House area. The focus will be to record/map and install signage at significant locations, and research the trails and routes connecting the trading centre at Rampart House with the resources and history of the surrounding area.
- **Flats "Across" - south of Old Crow** In June we will conduct an aerial survey of the system of lakes across Ch'ooddeenjik/Porcupine River to the south of Old Crow. While a significant area, it has received little previous research. A major trail crosses the collection of lakes and a network of smaller routes connect to the trail and to Ch'ooddeenjik and Old Crow.

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Rampart House showing Shanaghan Creek and terrain, 2005

- **Up Chyàh Njik/Crow River** In May/June we will build on 2012 research which identified and mapped a series of significant sites and routes between Old Crow and about Ts'iivii Shùhnjik/Timber Creek. 2013 activities will centre on accessibility and Gwich'in/English signage.

In 2013, we will conduct training and orientation seminars for participants, collaborate with academic researchers (e.g., the continuing Van Tat bird survey by Dave Mossop), and communicate the results of our research to the community and general public.



Border survey boat at Rampart House ca.1911. Glenbow Archives NA-513-34

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Vihsrainjik/Cody Creek



Canadian Heritage
Patrimoine canadien



Natural Resources Canada

6. 2012 Project Supporters

GOVERNMENT OF CANADA, MUSEUMS ASSISTANCE PROGRAM \$100,000

OBJECTIVES: The Aboriginal Museum Development component of the Museums Assistance Program helps aboriginal organizations enrich and preserve their cultural heritage. This component also seeks to increase public awareness and understanding of the rich and diverse cultures of Aboriginal peoples. The MAP program funded the research of the Navigation Systems Project to support and enhance Van Tat Gwich'in cultural heritage initiatives.

GOVERNMENT OF CANADA, POLAR CONTINENTAL SHELF PROJECT 29 hours helicopter support [valued at \$73,080]

OBJECTIVES: The Polar Continental Shelf Project provides critical logistical support for arctic research. The PCSP funded the Van Tat Gwich'in Navigation Systems Project under its Traditional Knowledge Program and its commitment to support research relevant to northern Aboriginal communities which fosters development of their research capability.

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Pink leaves of lidii masgit/Labrador tea on the trail in the Nohddhàa/Lone Mountain area

VUNTUT GWITCHIN GOVERNMENT

in kind: salaries, aboriginal language programs, office space and facilities, project management

OBJECTIVES: The VGG directs the Navigation Systems Project, provides the services of the VGG Heritage Manager, Heritage Researcher and seasonal Heritage Department personnel, arranges logistics and expediting for researchers and other project personnel, facilitates liaison between community resources and the project, provides office facilities, meeting and storage spaces, supports the work of the Heritage Committee which directs the project, and general logistical and administrative support. Importantly, VGG also administers Aboriginal language funding for language programs, translation and transcription formerly managed through the federal ALI.



YUKON ADVANCED EDUCATION, SUMMER TEMPORARY EMPLOYMENT **\$5000**

OBJECTIVES: The STEP program supports students and communities with funding for work experience and community initiatives. Support for the Navigation Systems Project assisted with tasks such as filming assistants, logistics and ornithology and archaeology field assistants.



YUKON DEPARTMENT OF TOURISM AND CULTURE, HERITAGE TRAILS **\$21,000**

OBJECTIVES: The Yukon Heritage Trails program provides support for researching, planning, improvement and development of heritage trails throughout the Yukon. Support for the Navigation Systems Project is directed toward revitalizing and documenting Van Tat Gwich'in heritage trails to make them available to the community, younger generations, and the wider public.



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7. 2012 Project Participants



Elders & Resource people

Robert Bruce Jr.
Stringer Charlie
Stephen Frost Sr.
Danny Kassi
John Joseph Kaye
Irwin Linklater
David Lord
Georgie Moses
Mary Jane Moses
Joel Peter
Esau Schafer
Marion Schafer

Youth

Frances Bruce
Malinda Bruce
Chelsea Charlie
Jay Charlie
Shane Charlie
David Frost
Darcy Andre Josie
Lance Nagwan
Erin Linklater
Philip Rispin
Jeffrey Peter
Theraz Tizya

Research team

Robert Bruce Jr.
Jane Montgomery
Mary Jane Moses
Marion Schafer
Shirleen Smith
Megan Williams

Filmers

Frances Bruce
Malinda Bruce
Erin Linklater
Mary Jane Moses

Heritage Committee

Robert Bruce Jr.
Mary Jane Moses
Jane Montgomery
Marion Schafer

Logistics

Robert Bruce Jr.
David Frost
Irwin Linklater
David Lord
Lance Nagwan
Philip Rispin
Bobby Netro
Theraz Tizya
Zac Dippo (Pilot)

Food/Catering

Elizabeth Kaye
Mary Jane Moses

Research Collaborators

Chelsea Charlie, bird survey assistant
Dougie Charlie, archaeologist assistant
David Frost, bird survey assistant
Shannon Harvey, assistant biologist
Darcie Andre Josie, bird survey assistant
Ray Le Blanc, archaeologist
Erin Linklater, bird survey & archaeological assistant
Dave Mossop, biologist
Jeffrey Peter, archaeologist assistant