

USA and CANADA

June – August 2005

Jim Russell

Contents

Contents	1	
Itinerary.....	2	
Maps.....	5	
Wednesday 22 June 2005 - Melbourne to New York.....	9	
Thursday 23 June 2005 - New York.....	9	
Friday 24 June 2005 – New York	12	
Saturday 25 June 2005 - New York.....	14	
Sunday 26 June 2005 - New York.....	17	
Monday 27 June 2005 - New York to Peterborough	19	
Tuesday 28 June 2005 - Peterborough.....	20	
Wednesday 29 June 2005 - Peterborough to Montréal.....	22	
Thursday 30 June 2005 - Montréal.....	23	
Friday 01 July 2005 - Montréal to Kingston	26	
Saturday 02 July 2005 - Kingston.....	28	
Sunday 03 July 2005 - Kingston to Toronto	31	
Monday 04 July 2005 - Toronto.....	34	
Tuesday 05 July 2005 - Toronto to Hamilton	35	
Wednesday 06 July 2005 - Kingston to Buffalo.....	37	
Thursday 07 July 2005 - Buffalo to Vancouver	37	
Friday 08 July 2005 - Vancouver.....	40	
Saturday 09 July 2005 - Vancouver	41	
Sunday 10 July 2005 - Vancouver to Nairn Falls	43	
Monday 11 July 2005 - Nairn Falls to Clearwater	46	
Tuesday 12 July 2005 - Clearwater Lake	48	
Wednesday 13 July 2005 - Clearwater to Mount Robson	49	
Thursday 14 July 2005 - Mount Robson	51	
Friday 15 July 2005 - Mount Robson to Jasper.....	52	
Saturday 16 July 2005 - Jasper.....	54	
Sunday 17 July 2005 - Icefields Parkway.....	57	
Monday 18 July 2005 - Banff.....	61	
Cave and Basin National Historic Site of Canada.....	62	
Banff Springs Snail.....	63	
Tuesday 19 July 2005 - Yoho National Park	64	
Wednesday 20 July 2005 - Golden	67	
Thursday 21 July 2005 - Golden to Vancouver	69	
Friday 22 July 2005 - Vancouver to Whitehorse	69	
Saturday 23 July 2005 - Whitehorse to Tok	70	
Sunday 24 July 2005 - Tok to McCarthy	73	
Monday 25 July 2005 - McCarthy.....	76	
The Kennecott Story.....	79	
Tuesday 26 July 2005 - McCarthy to Valdez.....	81	
Wednesday 27 July 2005 - Valdez	84	
Thursday 28 July 2005 - Valdez to Anchorage	87	
Friday 29 July 2005 - Anchorage to Denali	88	
Saturday 30 July 2005 - Denali	90	
Sunday 31 July 2005 - Denali to Arctic Circle	93	
Monday 01 August 2005 - Arctic Circle to Chena Hot Springs.....	94	
Tuesday 02 August 2005 - Chena Hot Springs	96	
Wednesday 03 August 2005 - Chena Hot Springs to Tok.....	98	
Thursday 04 August 2005 - Tok to Dawson City YT	101	
In Comeback, Caribou Cross Yukon River Into Canada.....	101	
Friday 05 August 2005 - Dawson City YT to Whitehorse.....	105	
Saturday 06 August 2005 - Whitehorse to Victoria, Vancouver Island	106	
Sunday 07 August 2005 - Victoria, Vancouver Island.....	107	
Monday 08 August 2005 - Victoria, Vancouver Island	107	
Tuesday 09 August 2005 - Victoria, Vancouver Island	107	
Wednesday 10 August 2005 - Victoria, Vancouver Island	110	
Thursday 11 August 2005 - Victoria, Vancouver Island	114	
Friday 12 – Sunday 14 August 2005 - Victoria to Melbourne.....	114	
Web References.....	115	
Appendix	121	
Web Extracts	121	
Bernie Karl: Owner of Chena Hot Springs Resort.....	123	
Fortymile Herd	129	
Geo-thermal Power Generation	133	
Ships at Sea Vancouver	137	

Itinerary

Itinerary US and Canada – June – August 2005

DATE	Day	Destination	Transport	Accommodation
Wed 22 June	01	Melbourne to New York	MEL – LAX QF0093 LAX – JFK QF0107	Meredith Halpern Brooklyn, New York, USA
Thurs 23 June	02	New York		Meredith's Brooklyn
Fri 24 June	03	New York		Meredith's Brooklyn
Sat 25 June	04	New York		Meredith's Brooklyn
Sun 26 June	05	New York		Meredith's Brooklyn
Mon 27 June	06	New York - Peterborough	Car Hertz	Jim & Sally Wilson Peterborough, NH, USA
Tues 28 June	07	Peterborough	Car	Jim & Sally
Wed 29 June	08	Peterborough to Montreal	Car	Simon Greenland Montreal, Quebec, Canada
Thurs 30 June	09	Montreal	Car	Simon's
Fri 01 July	10	Montreal - Kingston	Car	Super 8 Motel - Kingston
Sat 02 July	11	Kingston	Car	Super 8 Motel - Kingston
Sun 03 July	12	Kingston - Toronto	Car	Days Hotel & Conference Centre - Toronto Downtown
Mon 04 July	13	Toronto	Car	Days Hotel & Conference Centre
Tues 05 July	14	Toronto - Hamilton	Car	David and Barbara Trew Waterdown, Ontario, Canada
Wed 06 July	15	Hamilton - Buffalo	Car return Buffalo	Quality Inn Airport Buffalo, NY, USA
Thurs 07 July	16	Buffalo to Vancouver	Buffalo - Chicago AA4121 Chicago – Vancouver AA2397	Nancy Zipursky Vancouver, BC, Canada
Fri 08 July	17	Vancouver		Nancy's
Sat 09 July	18	Vancouver		Nancy's
Sun 10 July	19	July 10 start Rocky Mountains Explorer Tour	Pickup YWCA Beatty Street	Camping Midnight Sun Adventure Travel

		Nairn Falls	0830	Web: http://www.midnightsuntravel.com E-mail: tours@midnightsuntravel.com Toll-free: 1.800.255.5057 International: 1.250.480.9409 (Country code '1') Fax: 1.250.483.7422
Mon 11 July	20	Clearwater, BC		Camping
Tues 12 July	21	Wells Gray Provincial Park, BC		Camping
Wed 13 July	22	Mt. Robson Provincial Park, BC.		Camping
Thurs 14 July	23	Mt. Robson Provincial Park, BC.		Camping
Fri 15 July	24	Jasper National Park, AB		Camping
Sat 16 July	25	Jasper National Park, AB		Camping
Sun 17 July	26	Banff National Park & Lake Louise, AB		Camping
Mon 18 July	27	Banff National Park & Lake Louise, AB		Camping
Tues 19 July	28	Yoho National Park, BC.		Camping
Wed 20 July	29	Yoho National Park, BC.		Camping
Thurs 21 July	30	Leave the RME tour one day early and bus back to Vancouver		Nancy's
Fri 22 July	31	Fly to Whitehorse		Hyde on Jekyll Hostel
Sat 23 July	32	Start Alaskan Arctic Circle Tour, Tok, AK		Camping
Sun 24 July	33	McCarthy, St-Elias – Wrangell, AK		Camping
Mon 25 July	34	McCarthy, St-Elias – Wrangell, AK		Camping
Tues 26 July	35	Valdez, AK		Camping
Wed 27 July	36	Valdez, AK		Camping
Thurs 28 July	37	Anchorage, AK		Camping
Fri 29 July	38	Denali National Park, AK		Camping
Sat 30 July	39	Denali National Park, AK		Camping
Sun 31 July	40	Arctic Circle, AK		Camping
Mon 01 Aug	41	Chena Hot Springs, AK		Camping
Tues 02 Aug	42	Chena Hot Springs, AK		Camping
Wed 03 Aug	43	Delta Junction, AK		Camping
Thurs 04 Aug	44	Dawson City, YT		Camping
Fri 05 Aug	45	Whitehorse		Hyde on Jekyll Hostel
Sat 06 Aug	46	Klondike Tour Ends – Whitehorse to Vancouver	Air North FI 505 Depart 0815 Arrive 1030	Ken and Elaine Brown Victoria, B.C, Canada +
Sun Aug 07		Victoria		Ken and Elaine Brown
Mon Aug 08				Ken and Elaine Brown

Tues Aug 09				Ken and Elaine Brown
Wed Aug 10				Ken and Elaine Brown
Thurs Aug 11				Ken and Elaine Brown
Fri 12 Aug		Vancouver to Melbourne	Vancouver – LA QF3780 LA – MEL QF94	
Sun 14 Aug		Arrive Melbourne	0755	

Maps

Flights USA and Canada



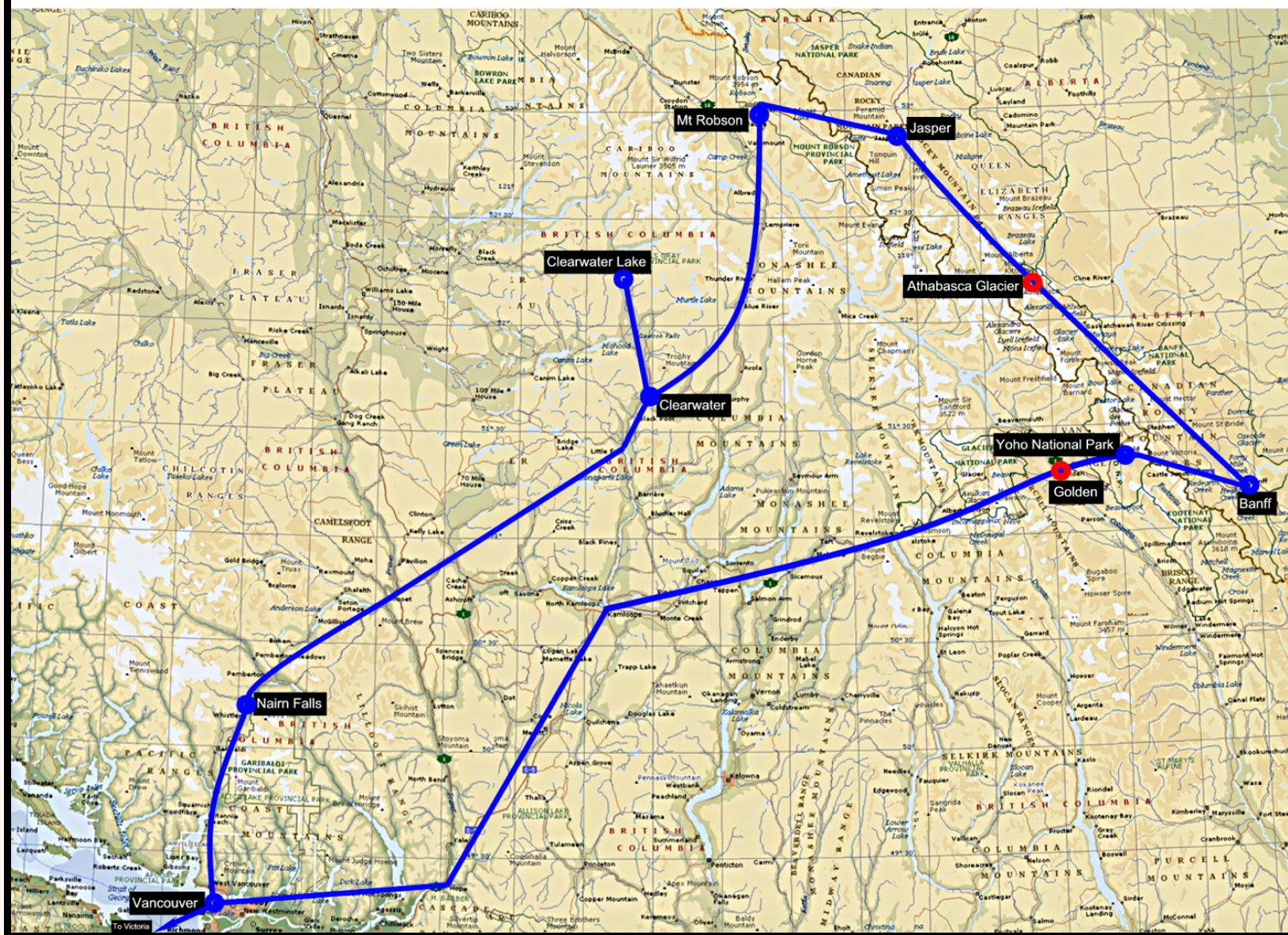
Flights

Melbourne - Los Angeles - New York
Buffalo - Chicago - Vancouver
Vancouver - Whitehorse
Whitehorse - Vancouver
Vancouver - Los Angeles - Melbourne

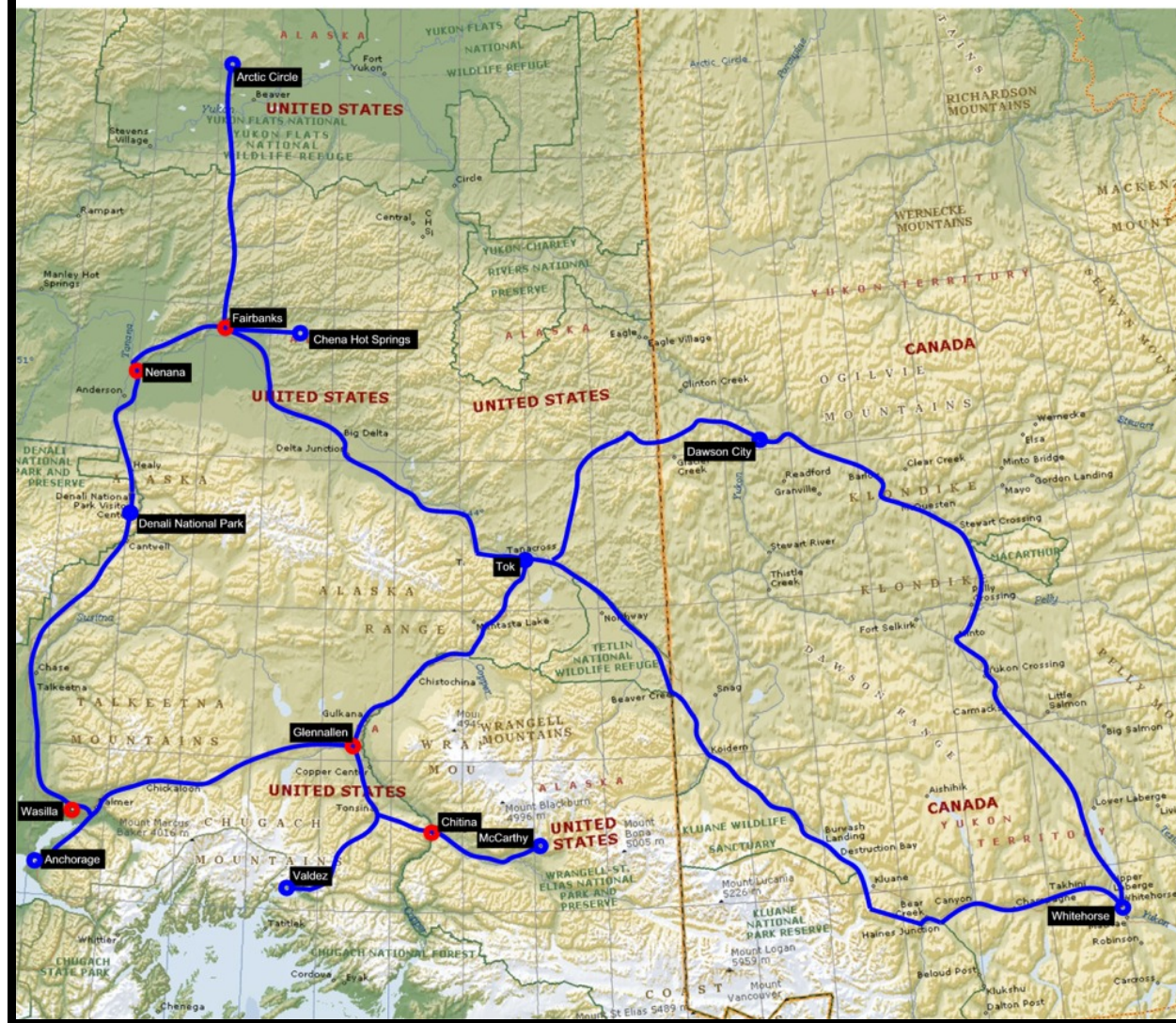
New York to Buffalo



Rocky Mountain Explorer



Arctic Circle Tour



Wednesday 22 June 2005 - Melbourne to New York

Day 01

Depart from Melbourne on QF93 bound for Los Angeles soon after 10:30. The flight time is expected to be about 13 hour and 5 minutes. It takes a little longer and we arrive pretty well on time at 07:45 on the same day. Processing through immigration and customs seems quicker than when Josh and I passed through LA last November.

The Qantas flight to New York is scheduled for a 09:05 departure and believe it or not all the passengers were transferred in time. We were then held up for about 15 minutes when Air Traffic Control changed our route and the aircraft computers had to be reset.

The flight was expected to take a little over 4 hours, but as we approached the Great Lakes we were put into a holding pattern because of thunderstorms and lightning in the vicinity of JFK Airport. Result was that we arrived half an hour late, at 18:00. The taxi driver has no idea where

Meredith's place is. With a little help from his base he soon gets underway and in about half an hour I am outside her apartment in Park Slope, Brooklyn.

Meredith has an invitation to drinks at friends nearby. A quick shower and a shave, and although it is nearly 24 hours since I left Melbourne, I feel more like a human again. Tim and Leslie are a couple of blocks away and it is a very pleasant evening for a walk. The thunderstorms have past, but more are forecast for the weekend

Thursday 23 June 2005 - New York

Day 02



Terracotta Water Jar - 510BC

The plan for today is to visit the Metropolitan Museum of Art, The Guggenheim, and Central Park and get tickets for either Alan Ayckbourn's

new play 'Private Fears in Public Places' or 'The Producers'.

Things didn't go quite to plan; hopped off the subway at E59 Street to see if I can get tickets and find that the box office doesn't open until 12:00 so I head off up Park Avenue and Fifth Avenue to the Metropolitan Museum about 20 blocks away. Seems a long way, but nothing compared with the distance I walked in the Museum.

After nearly 4 hours I was becoming footsore and unable to take in anymore of the endless works of art on display. They seem to have so many works by each of the Old Masters that it is almost obscene. But that is not all, Greek, Roman, African, Asian, Modern, American art to name some of the collections. It is vast and what are on display are first class examples of the work of the region or artist. Lighting is excellent and the paintings, even those from the 15th and 16th C, are bright and colourful, unlike similar works in other galleries.



Courtyard - The American Wing - Metropolitan Museum

Photographs can easily be taken without a flash.



5th Avenue South



Between Madison Avenue and 5th Ave



Portrait Statue of a Boy - 1st C BC - Early 1st C AD



Gold Beaker - Peru - 9th - 11th C

There are many special exhibitions, including

Matisse: The Fabric of Dreams His Art and His Textiles

June 23, 2005–September 25, 2005

Shows the impact of Henri Matisse's lifelong interest in textiles is shown in a selection of approximately 75 paintings, drawings, prints, and painted paper cutouts. Also exhibited are examples from the artist's personal collection of textiles, many of which have been packed away in family trunks since Matisse's death in

1954. Of particular interest are Matisse's canvases inspired by a fragment of blue-and-white printed cotton that the artist purchased from a secondhand shop in Paris, works from the 1910s and 1920s demonstrating the influence of North African fabrics and screens, paintings featuring Romanian blouses and couture gowns, and Matisse's late paper cutouts, which are juxtaposed with his African and Polynesian textiles. The exhibition concludes with maquettes of the chasubles that Matisse designed for the Chapel of the Rosary at Vence.

Tony Oursler at the Met: "Studio" and "Climaxed"
May 17, 2005–September 18, 2005

Inspired by Gustave Courbet's *The Artist's Studio: A real allegory of a seven year phase in my artistic and moral life* (1855), contemporary artist



Climaxed

Tony Oursler (b. 1957) created his own three-dimensional studio identical in size to Courbet's painting.

The mixed-media installation playfully merges the artist's professional and personal lives into a narrative fashioned as allegory. A second gallery holds "Climaxed," Mr. Oursler's most recent work.



Guggenheim Museum - New York

Climaxed is a Mixed media: Aqua-Resin, three-video projection, surround sound; 8 x 4 x 3 ft.

Performance and text by Tony Oursler, animation by Josh Thorson and John Leamy, 2005



Armour and Arms Gallery



Guggenheim Museum - New York

A Curator's Eye: J. Stewart Johnson at the Met, 1990–2004

March 1, 2005–February 5, 2006

From 1990 to 2004, J. Stewart Johnson served as the principal curator for the modern design and architecture collection at The Metropolitan Museum of Art. During these 14 years, he made a number of important

acquisitions that augmented and reshaped an already significant collection. This exhibition presents a selection of these works, demonstrating his skill as both a connoisseur and a scholar.

<http://www.metmuseum.org/home.asp>



Claude Monet - bridge over a pool of water lilies



Turtle Pond - Central Park



Times Square

Having exhausted myself at the Metropolitan I headed further up 5th Ave to the Guggenheim. Closed on Thursday. The building designed by Frank Lloyd Wright is an architectural icon. Built in the second half of the 20th C the concrete structure is cracking and testing is underway to determine the growth rate of the

cracks and to establish a procedure to repair them.

I'll come back another day.

I was longer than I expected at the Metropolitan, longer than I was at the London Museum, and as the Guggenheim was closed I have time to walk back through Central Park to E 59th Street. It is a beautiful day. The playing fields on the Great Lawn are filled with people playing baseball and other games and generally the park is crowded with people of all ages and nationalities. Mothers with young children are everywhere, although I suspect some were nannies taking their charges out in the Park.



Alice in Wonderland

Bad news 'Private Lies and Public Fears' is sold out until July 3rd. Plan B is activated. Off to the discount ticket booth at Times Square to see if they have tickets for The Producers. They have; not the best in the house, in the mezzanine (Circle) about half way back. Still a good clear view of the stage and sound was excellent.

A very funny, slick, and professional production.

Meredith has to return to the hospital to perform a Caesarean so I make my way back to her apartment. Arrive back without getting lost.



Bethesda Terrace and Fountain - Central Park

<http://www.centralparknyc.org/>

Friday 24 June 2005 – New York

Day 03

A rather slow start this morning as I had a good night's sleep and woke later than usual and Meredith did not get back from the hospital until about

04:00. We were to go out together but in the end I decided to leave her sleeping.

As the Guggenheim was closed yesterday I returned to find it open but some exhibition spaces were closed for the installation of new exhibitions. These are to be in the

winding ramps of the museum and it was these that were closed.

The permanent artworks are mainly those that were collected by Solomon Guggenheim during his lifetime. There are works by the Impressionists and many modern works from the early 20th C.



Meredith at her consulting rooms

The collection of modern art was acquired under the influence of Hilla Rebay who was curator of the collection for many years and an accomplished artist. She encouraged Guggenheim to build substantial collections of some artists, particular Vasily Kandinsky.

The principal exhibition 'Hilla Rebay and Solomon R Guggenheim' traces the association between them and the development of the collection. It features many of Rebay's own work.

http://www.guggenheim.org/exhibitions/hilla_rebay/index.html



Grand Central Terminal

A gallery is devoted to works by Vasily Kandinsky and another is devoted to the Impressionists.

Perhaps more than any other twentieth-century painter, Vasily Kandinsky has been closely linked to the history of the Solomon R. Guggenheim Museum. Hilla von Rebay, artist, art advisor to Solomon R. Guggenheim, and the museum's first director, introduced Guggenheim to Kandinsky at his studio at the Dessau Bauhaus in the summer of 1929. This was the start of a period of continuous acquisition of Kandinsky's oils and watercolors, beginning with his masterpiece *Composition 8* (1923) and growing to encompass over 150 works in the Solomon R. Guggenheim Museum Permanent Collection.

<http://www.guggenheim.org/exhibitions/kandinsky/index.html>

At 12:30 I rang Meredith and we arranged to meet for lunch at 14:30 near Greenwich Village.



Washington Square Park



Federal Court Building



Union Square

On my way from the Guggenheim I walk to the subway past some of the grand apartment blocks and offices in the area. I have time to visit Grand Central Station and Union Square on my way to meet Meredith.

<http://www.grandcentralterminal.com/pages/default.aspx>

A sandwich lunch and we set off to wander through the streets of Soho, Washington Square Park, along Canal Street, through Chinatown, Foley Square and the Federal Court buildings to the City Hall and the very pleasant City Hall Park.

<http://www.archaeology.org/online/features/cityhall/>
<http://www.newyorkled.com/cityhall.htm>



City Hall Park

We sit for a while, enjoy the shade and rest our feet. Mine are certainly feeling the effect of thumping pavements for 2 days.

Along the way we have visited Meredith's consulting rooms.



St Paul's Chapel

We end the day making our way to Fulton Street station, passing St Paul's Chapel near the site of the World Trade Centre. St. Paul's Chapel is Manhattan's oldest public building in continuous use.

<http://www.saintpaulschapel.org/>

Saturday 25 June 2005 - New York

Day 04

There is no need to rush to get up and out as nothing will open until 10:00

and it only takes about 30 minutes to the city.

Meredith is still recovering from Thursday night - Friday morning and as we are going to a barbeque in

Williamsburg in the afternoon, I set out to spend the morning at the South Street Seaport Museum.

<http://www.southstseaport.org/>

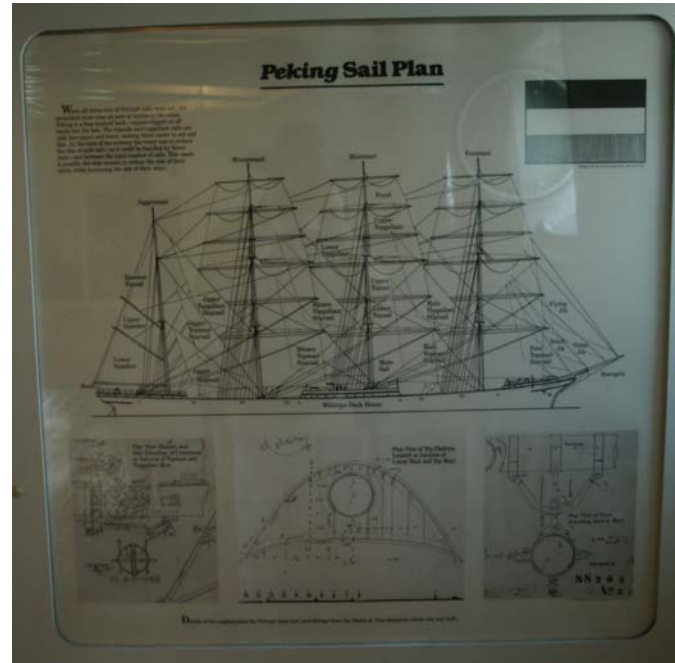
This is an area on South Street Lower Manhattan where ships, wharves and warehouses of the days of sailing ships are being preserved.



The 'Peking'

The ships are open for inspection. The Peking is a 4 masted, steel-hulled bark, built in 1911. She was one of the last built. Apparently few steel or iron hulled sailing ships were built in the USA as timber was still plentiful and cheaper than iron or steel. None

survive. On board is an interesting photographic display of the history of the Peking and ships like her that carried phosphate from Chile and Peru, around Cape Horn to the Eastern seaboard of the US. A birthday party for young pirates was in progress while I was on board.



The Peking's Sail Plan

Nearby is the Ambrose, a lightship built in 1908 to mark the entrance to the Ambrose Channel in to New York Harbour. The ships were always in danger from storms and passing ships, which occasionally ran a lightship down. This hazard became more significant after the ships were fitted with Radio Direction Finding beacons. Incoming ships sometimes misjudged their speed and sailed into the lightships. This happened to the Nantucket lightship.

The restored warehouses have become commercial spaces and Seaport museums. The main Seaport

Museum has collections of maritime memorabilia and archaeological relics of the first Dutch settlers in New Amsterdam.



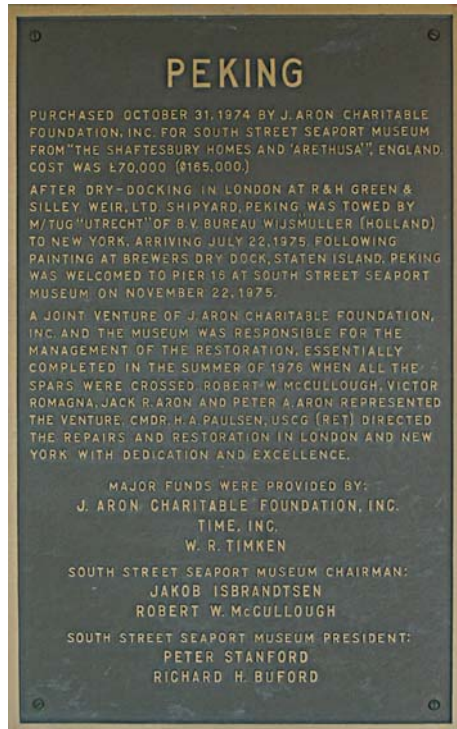
Pirates aboard the Peking



Naima Rauam's Exhibition in the Fish Market

The Melville Gallery had a photographic exhibition, 'Harlem Is Downtown', featuring prominent residents from Harlem and their contributions during the last

century. Mostly black Americans; their contributions span all areas of community and artistic activity.



This exhibit honours 30 Harlem individuals from the original Cotton Club dancers, The Silver Belles, to Harlem Rens basketball player John Isaacs to Congressman Charles B. Rangel, who have helped to shape and define today's Harlem. The exhibit features a comprehensive timeline with archival photographs detailing Harlem's history extending back to 1625 when the first slaves were brought to Dutch New

Amsterdam, arriving at the city's original port on the East River.

Harlem Is was created through the lens of Harlem public school students who researched and documented local Harlem heroes and neighbourhoods.



Water Street

Next to the Seaport Museum is the Fulton Fish Market. In a few weeks this old market is to be closed and a new, indoor market is to open at Hunt's Point in the Bronx.

Artist Naima Rauam has had a studio overlooking the market since 1984 has recorded the activities of the market in oils and charcoal images. To mark the closure of the market an exhibition of her work was on display, just for the weekend, in the fish market.

<http://www.artpm.com/>

<http://www.newsday.com/entertainment/arts/ny-et/lede4367637aug03,0,5727082.story?coll=ny-arts-headlines>



A tight squeeze



Flatbush Avenue - Brooklyn

The afternoon barbeque is to farewell a couple whose children Meredith had delivered. He was from New Zealand and they were returning to provide a better

environment than New York to bring up the children. Williamsburg is a locality in Brooklyn.

The house was situated in an industrial area that is about to be redeveloped and when that happens

the view of the Williamsburg Bridge will disappear.

It is a very hot day and the BBQ is in a small parking lot being kept a little cooler by the water overflowing from the children's pools.

About 17:00 we head back to Park Slope via Manhattan on the subway for a rest in the cool apartment before we

meet Meredith's friend Sue for dinner at 1492 (the year Columbus discovered America) at 60 Clinton Street Manhattan. I had some succulent lamb chops. After dinner we joined Lisa, Tom and Ben at the Salt Bar in Clinton Street.

It's getting a little late so we take a cab home.

Sunday 26 June 2005 - New York

Day 05



Old First Reformed Church - Park Slopes

No particular plans for the morning so when Meredith goes for her run I go for a walk around Park Slopes and up to Prospect Park. The park is situated

near the Grand Army Plaza and was designed in 1860's by the designers of Central Park, Manhattan; Frederick Law Olmsted, the park's superintendent at the time, and Calvert Vaux. It is large, not as large as Central Park and has shaded walks, large green open spaces and a large lake.

<http://www.prospectpark.org/>



Tree lined street - Park Slopes

Lunch is at Ping Seafood Restaurant 22, Mott Street Chinatown with some of M's girlfriends. A misunderstanding about the time has us calling a car to

take us. We are late but still arrive as the others are arriving. An excellent Dim Sum at a reasonable price.



Statue of Liberty



**Armed Services Memorial -
Battery Park**

After lunch Meredith and I walk through Lower Manhattan to NYU Downtown Hospital to visit one of Meredith's patients and then on to Ground Zero and Battery Point and Park.

<http://www.nyudh.org/nyudh/index.jsp>

Ground Zero is now a cleaned up very large hole in the ground.

Unfortunately it is very hazy and hot and the view of the Statue of Liberty and the New Jersey side of the Hudson River is not very good.

At Dennis Connor's North Cove the IDEC Trimaran is waiting to attempt to break the Single-Handed Trans-Atlantic Record of 7 days 2 hours set in June 1994. The 90ft. set a new Single-Handed Round-the-World Record of 72 days 22 hours and 54 minutes in February 2004.



IDEC Trimaran



Grand Army Place - Brooklyn



Brooklyn Bridge from Brooklyn Heights



Lower Manhattan Skyline

It is soon time to return to Meredith's by 16:00 to meet Alison and Bill Greenland who are joining me for the drive to Montreal and Simon's place.

They arrive 5 minutes after we get back. This seems to have been a few days of just getting there on time.

Dinner at a nearby restaurant is excellent. Tomorrow we leave for Canada.

Monday 27 June 2005 - New York to Peterborough

Day 06



Church - Old Sturbridge Village

First task is to pickup the car at Hertz at JFK Airport. Perhaps not the closest location but the route north is much simpler than departing from downtown Manhattan. Hire car fare is \$30.00; \$20 less than the cab fare JFK to Meredith's place.



Farm - Old Sturbridge Village

Trip takes about 25 minutes in the moderate morning traffic and by about 09:15 we are on our way. Progress is slow for a while as road and bridgeworks have reduced the number of available lanes on the New England Thruway. Once we are clear of them we are able to travel at up to 65mph on the I93, I91 and I84 through Connecticut to Old Sturbridge in Massachusetts. We arrive there about 12:45; it is stinking hot, nevertheless we set out to explore the reconstructed Quaker village. Sue and I had visited the village on our previous visit to New England in 1993. The life of the early settlers is well displayed in the relocated or reconstructed houses, farms, churches and public buildings. There are activities all day for children.

<http://www.osv.org/>

We have corn chowder in a bread bowl for lunch and set off for Peterborough.



Potter - Old Sturbridge Village

The route is a little roundabout as we head west along the Mass Turnpike to rejoin the I91 North. We eventually turn off and start to head east again towards Peterborough in New Hampshire and our stay with Jim and Sally Wilson.

Near Peterborough is the Cathedral of the Pines, a church set in the forest. It is a multi denominational place of worship and many ex-service organisations and other groups have small memorials here.



Potter's Kiln - Old Sturbridge Village

We arrived 10 minutes after closing time, but were still able to walk in and

look around. The bells were still ringing as we approached. It is a very tranquil place set in the tall pines at the top of the hill and a beautiful view across the valley behind the altar.

<http://www.cathedralpines.com/>



Baseball Game - Old Sturbridge Village

We are 15 minutes from our destination and we arrive just on 18:00.



Store - Old Sturbridge Village

A long day with a few wrong turnings. No dramas as the GPS soon told us we were off the track and we were soon able to retrace our path and return to the correct route.

Tuesday 28 June 2005 - Peterborough

Day 07

It is cooler this morning and very humid. Mid morning we head to the local hospital with Jim to get Bill's glasses repaired. Jim shows us the Wellness Centre at the hospital where he and Sally exercise under excellent conditions and supervision.

Back to the house to pick up Sally and then into the centre of the pretty New

England town for a walk around and lunch.

It is starting to rain, so walking around is not an option; we drive around and at the bookshop have a light lunch.

Sally and Jim are playing bridge; not together; Jim has his friends to the house and Sally goes to the Golf Club.

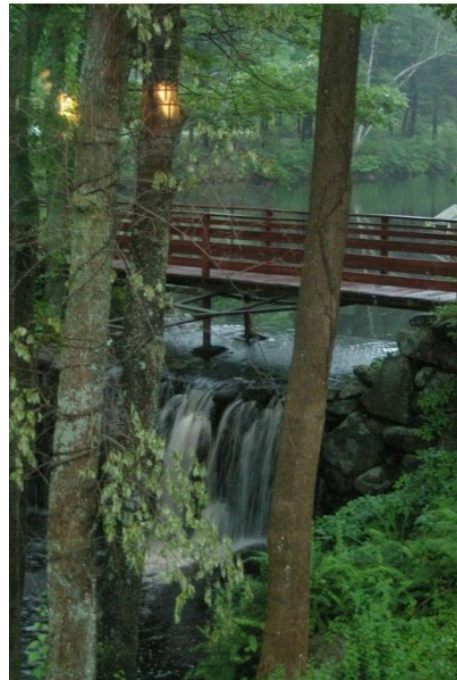
We head back into town to explore further. It is now raining very heavily and walking around is still out of the question.

We are lucky to get a parking spot right outside the Peterborough Historical Society building and museum.

A small museum, it has displays of colonial furniture and life in the district.



Cathedral of the Pines



Millpond at Lilly's - Peterborough



Jim and Sally Wilson

The room featuring the industries of the region is interesting in the way it shows how Peterborough has transformed itself to meet changing circumstances.

Originally a farming community, it became a mill town processing flax, a centre for Guernsey cattle, a centre for education and the arts and a manufacturing centre. As each industry declined the entrepreneurs of the town seemed to be able to find a new life for the town.

The rain eases for a short while and we are able to explore a little and then down it comes again so we retreat to the pub for a drink and watch the rain and the people passing by.



Herb Garden - Old Sturbridge Village



Historical Society Building - Peterborough



Harlow's Pub - Peterborough

We return to Jim and Sally's place to find Jim's friends are just leaving.

Time to relax for a while before we go out to dinner at Lilly's, one of the Wilson's favourite restaurants just out

of town beside a millpond. The building was once a mill and we each had a delicious meal.

When we return the Red Sox and the Cleveland Indians are in the 5th innings. Cleveland are leading; a little depressing. However the Red Sox soon take the lead

and things are looking better. Then in the top of the ninth the Indians score 4 runs and it doesn't look too good for the Red Sox.

Wednesday 29 June 2005 - Peterborough to Montréal

Day 08

We have about 350 miles to travel to Montréal; at interstate freeway speeds it should take about 7 hours. The state and local highways can be more interesting as you drive through towns and villages, but much slower.

We set off just after 09:00 and head east first toward Concord NH and then north on the I93 towards the White Mountain National Forest.

We reach Lincoln at about 11:15 and decide a stop is in order to have a look at the National Park Visitor Centre. There is obviously plenty to do in the Park and the Park Authority display of the history of the park is very interesting showing.

The region was clear felled for timber during the 1800's and whilst early logging was restricted to areas near rivers and streams the introduction of the logging railways meant that almost everywhere could be logged. Ten years of persistent campaigning finally lead to the US Congress passing a law to enable the government to buy back land and include it in a National Forest. White Mountain was the focus of the campaign and in the early 1900's large tracts of denuded forestland was purchased and allowed to regenerate. Fortunately the regrowth was very similar to the original forest and the diversity of flora and fauna has been re-established.



Crawford Path Sign - White Mountain National Forest Visitor Centre

<http://www.cs.dartmouth.edu/whites/>
http://www.fs.fed.us/r9/forests/white_mountain/
<http://www.compassmonkey.com/places/locations.php/201/history>
<http://www.outdoors.org/publications/outdoors/2000/2000-crawford-main.cfm>

<http://www.nhstateparks.org/ParksPages/CrawfordNotch/CrawfordNotchHist.html>

In 1819 Abel and Ethan Allen opened the Crawford Path, the footpath they had blazed to the summit of Mt Washington. This is the oldest continuously maintained walking path in the US.

We have lunch in a café in Lincoln before proceeding on our way to the border, which we cross without incident, and on to Montréal. US drivers are rather observant of the speed limit and when it is exceeded everyone travels at the same speed. Not so the inhabitants of Quebec. They are as bad as the British on the motorways.

The navigation system serves us well as we enter the outskirts of Montréal and the maze of freeways that skirt the city centre. When we finally park the car at Simon's, at 17:30, the GPS says we are 33ft from our destination – we are at the back door not the front as Bill has been able to direct me to Simon's parking space.

We are all a bit tired, so a drink, dinner and an evening at home talking about travels and an early night seems to be the order of the day.



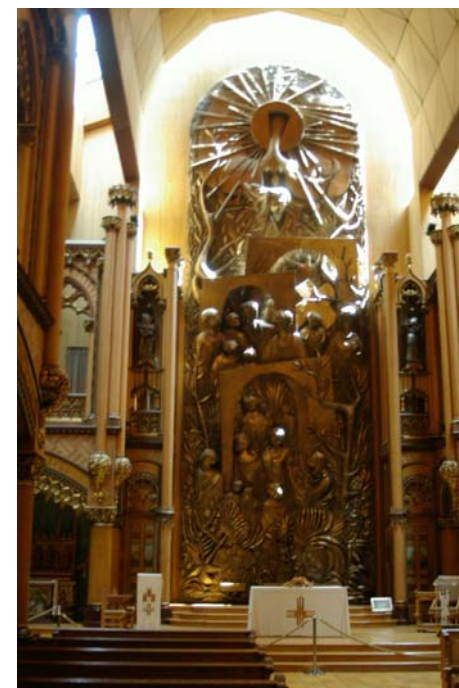
Pointe-à-Callière



Museum of Archaeology and History



Notre Dame Basilica



Chapel - Notre Dame Basilica

Another very hot and humid day; undaunted we set off to explore Old Montréal. The Metro is the quickest way to get there and we head for the nearby Jarry Metro Station, expecting to be able to buy a one day Carte Touristique. No such luck; apparently they can only be obtained at the main stations.

Trains are frequent and fast and we are soon in Old Montréal. The area flanking the St Lawrence River was for several hundred years the heart of

the city. In recent times the commercial centre has moved to new buildings away from the river and many of the buildings in Old Montréal are vacant, awaiting conversion to apartments or renovation. The facades must be preserved to maintain the character of the old city, so demolition is not an option.

We pass by the vestiges of the first general hospital established by the Grey Nuns in 1693.

<http://www.patrimoine-religieux.qc.ca/commucol/commucol1e.htm>

Our first stop is the Museum of Archaeology and History at Pointe-à-Callière. This is the place where Sieur de Maisonneuve set up a religious mission named Ville Marie to convert the Indians to Catholicism in 1642. At the junction of the St Lawrence River and a small river, the point could be defended against attack.



Marché Bonsecours



Les vestiges; l'Hôpital général de Montréal; 1693-1871

The museum is built over the remains of successive developments of the city and excavations have uncovered many of them so that the history can be traced through them. Visitors descend below the present street

level to walk through the excavations. Artefacts uncovered at the site are displayed and explained.



Beneath Pointe-à-Callière



Place Royale

Montréal became an important trading port as it was as far as ships could navigate the St Lawrence River. Rapids prevented them from

going further. This and the growing fur trade stimulated growth of the city.



Place d'Armes



Old Montréal

There was also a small exhibition of Roman artefacts from the region of Lyon in France that was very well presented.

A special exhibition of the lives and loves of couples from Montréal called 'Montréal Love Stories' included lovers' letters, gifts, courting and marriage traditions and spoken accounts of individuals lives.

After lunch we join a walking tour of Old Montréal.



View of Port from Notre-Dame-de-Bon-Secours Chapel

The tour commences with a visit to the Basilica Notre Dame. Built in 1829, the church seats 5000 people. The floor of the church slopes down towards the front, following the slope of the land, thus providing worshippers a better view of the altar. The chapel at the rear was badly damaged by fire and has been restored with a modern ceiling design and a huge bronze backdrop to the altar. Next door is the oldest surviving building in Old Montréal; the Sulpician Seminary built in 1684.

In the centre of the Place d'Armes is a statue of Paul de Chomedey de Maisonneuve, the founder

of Montréal and across from the Basilica is the first Bank of Montréal, established in 1817.



Notre-Dame-de-Bon-Secours Chapel

The walk takes us along Rue Saint Jacques past the imposing bank buildings designed to flaunt the wealth and commercial power of Montréal. The banking chamber of the Royal Bank of Canada is imposing and extravagantly decorated.



Parliament Building - Montréal

We continue on through the old warehouse district to Pointe-à-Callière and along Rue de la

Commune, past former waterfront warehouses until we reach a narrow cobbled street, one of the few remaining in Old Montréal.

We stop briefly to look at a series of converted warehouses along a broad boulevard that covers a parking station, one of the few in Old Montréal.

The tour finishes on the meandering Rue Saint Paul at the Marché Bonsecours. This was once a local market and has been restored to house boutique shops.



Jazz Festival Crowd

Next door to the market is the Notre Dame de Bon Secours Chapel, also known as the seafarers' church. Travellers came here to pray for a safe journey and to give thanks on their safe return. It is a pretty church decorated with many hanging ship models. For me the initial attraction is the tower from which there is a good view of the port area and the bridges linking Montréal, and island, to the mainland. It is 89 steps to the viewing area. The climb is worthwhile despite the haze, which hangs over the city. To reach the tower it is necessary to pass through a very small museum commemorating the life of Marguerite Bourgeoys, a remarkable woman who founded the

Congregation of Notre Dame, an order of nuns devoted to teaching. She laid the foundations of the first chapel on the site in 1657. During her life she travelled extensively in the region and made seven crossings of the Atlantic to France.

http://www.civilization.ca/vmnf/collect/Marguer/margu_1e.html

As the others had decided not to climb the tower I made my way back past the parliament building to join them in the Place Jacques Cartier.

After walking around in the hot sun it is time for a drink so we return to the Place d'Armes and a rooftop bar that had been pointed out by our walking tour guide. We enjoy the drink and the cool breeze until it is time to meet Andreanne for dinner in China Town.

We have an excellent meal at the Beijing Restaurant.

It is the first night of the Montréal Jazz Festival and so we take a walk through the area and stop and listen for a while. Bill, Allison and myself decide to return home and leave Simon and Andreanne to listen the music.

Friday 01 July 2005 - Montréal to Kingston

Day 10



Martello Tower - Kingston
Canada Day

Canada Day is not big in Quebec; their big day is Jean Paul Baptiste day on 24th June so much of the city is open.

Kingston is about 3½ hours away so I have decided not to leave until after lunch. This gives us a chance to visit the nearby Jean Talon Market where there is a profusion of fresh produce in a market similar to the local markets in France. Presentation of the produce by the stallholders is very good.



Jean Talon Market



Downtown Montréal - from Mont Real

We then drive to the top of Mont Réal to view the city. The haze from the heat and humidity is unbelievable. On a clear day the view would be spectacular. Descending the mountain we travel the length of Mount Royal Street to the site of the 1976 Olympic Games and then circle back home.

At 13:00, after a light lunch, I head off to Kingston. Traffic is light and I have no problems negotiating my way out of Montréal and onto the highway.



Fireworks - Canada Day - Kingston



Along the way I spot a sign to a lock on the St Lawrence Seaway. Thinking this may be interesting I turn off towards the town of Iroquois and find that at the park beside the lock the Rotarians are running the Canada Day Celebrations. There are

performers, jumping castle for the kids and an enormous barbeque. There is quite a crowd and people continue to arrive.



Mothers Group - Mont Real

I stay for a while as two ships traverse the lock, one each way. The lock can accommodate a maximum water difference of 6 feet. Today it is about 6 inches.

The St. Lawrence Seaway was officially opened in 1959.

The Seaway system is connected by 6 short canals with a total length of less than 60 nautical miles. There are 19 locks, filled and emptied by gravity.

Each lock is 233.5 metres long (766 feet), 24.4 metres wide (80 feet) and 9.1 metres deep (30 feet) over the sill. A lock fills with approximately 91 million litres of water (24 million gallons) in just 7 to 10 minutes. Getting through a lock takes about 45 minutes.

<http://www.greatlakes-seaway.com/en/aboutus/lcc.html>
http://collections.ic.gc.ca/stlauren/hist/hi_slcanals.htm

By now it is 16:30 so I decide to support the Rotarians and buy a barbeque meal for dinner; half a chicken, coleslaw, baked beans and roll, and take it with me to Kingston.

By 18:15 I am in the hotel checking on the Canada Day activities in Kingston. Fireworks are at 22:00 at Confederation Park. I make my to the park at 20:00 and after walking around the entertainment for a while I found my self a spot at the end of a pier to sit and wait for the fireworks. This turned out to be possibly the best spot and many more people joined me as time for the fireworks came closer.



Rotary Barbeque

The display lasted about 10 minutes. When I got up from my seat and turned to leave it was obvious a very large crowd had gathered on the pier and in the park to see the display.

http://en.wikipedia.org/wiki/Kingston,_Ontario

Kingston History: The French originally settled upon a traditional Mississaugas First Nation site called *Kateracoui* (Cataraqui in the common transliteration which uses French pronunciation rules, it is pronounced

CAT - AH - RAH - KWAY) in 1673 and established Fort Frontenac. The fort was captured and destroyed by the British in the Battle of Fort Frontenac near the end of the Seven Years' War in 1758. A receiving centre for fleeing refugees from the American Revolution, it became the primary community of south-eastern Upper Canada.

New settlement from the United Empire Loyalists (UEL) and Mohawks from the Six Nations in New York, led by Molly Brant, formed a significant part of an expanding population in the area at the end of the 18th century.

During the War of 1812, Kingston was the base for the Lake Ontario division of the Great Lakes British naval fleet and engaged in a vigorous arms race with the American fleet based at Sackett's Harbor, New York for control of Lake Ontario. After the war, Britain built Fort Henry and a series of distinctive Martello towers to guard the entrance to the Rideau Canal (the fort is still standing and is a popular tourist destination).

Toronto, and then later to Ottawa where it has resided since. Kingston was, however, the home of Canada's first Prime Minister, Sir John A. Macdonald and on June 13 1841 was the site of the first meeting of the Parliament of Canada.



Iroquois Lock - St Lawrence Seaway

During the late nineteenth and early twentieth centuries, Kingston was an important Great Lakes port and a center for shipbuilding and locomotive building, including the largest locomotive works in the British Empire (the Canadian Locomotive Company - later Fairbanks-Morse - closed in 1969), but most heavy industry has now left the city and employment is now primarily in the institutional, military, and service/retail sectors.

The term "Cataraqui", from the original native name for Kingston, applies generally to regions Northward and Westward of present-day downtown Kingston.

Kingston was one of the contenders for the capital of the united Canadas before Confederation, but after a brief stint as the capital from 1841 to 1844, it lost out to an alternating location of Montreal and



Crowds gathering for Canada Day - Confederation Park - Kingston

Saturday 02 July 2005 - Kingston

Day 11

Last night Confederation Park was a sea of people; this morning it is a sea of market tents. Overnight a craft market has been set up in the park.

Kingston was once a defensive town against the Americans as witnessed by Fort Henry and the Martello towers at the entrance to the port. Established as a fur trading post Kingston became a principal British defensive post west of Quebec and at one time it was the national capital for a while.

Kingston became an important port for preparing rafts of timber for passage down the St Lawrence River to Montréal. Timber was brought by boat to Kingston and as a consequence entrepreneurial traders developed ship building and shipping companies. The construction of

locks that bypassed the rapids between Kingston and Montréal meant that ocean going ships could dock in Kingston and timber could be shipped to all corners of the world.

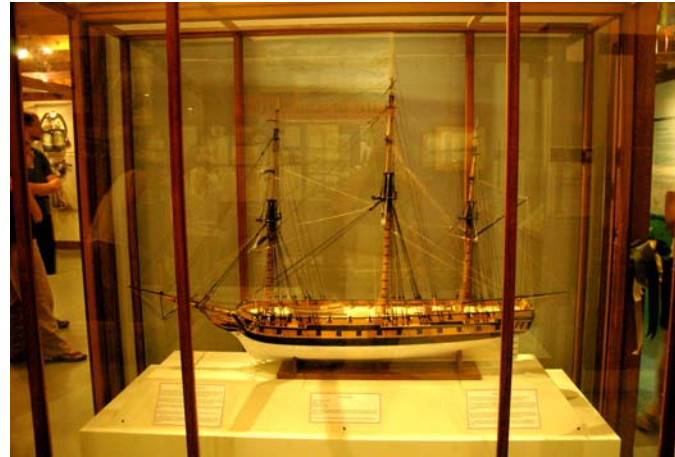


St Mary's Cathedral - Kingston

Opening of the St Lawrence Seaway in 1958 ended Kingston as a major port as the larger ships bypassed the town in the new channel.

The Marine Museum of the Great Lakes at Kingston chronicles the exploits of the ships and men who plied the great lakes and the ship builders and owners who carried timber, ore, passengers and other goods. The story of the Calvin family,

very successful shipbuilders and owners, is a feature of the museum. The museum is situated next to a dry dock, as the buildings were once part of a working shipbuilding and repair yard. The pumps for draining the dock are part of the museum.



Great Lakes Sailing Ship



Marine Museum of the Great Lakes

<http://www.marmus.ca/>

Models of steamships and sailing ships that plied the lake are on display and a room devoted to ship construction methods is very interesting.

Moored alongside the museum is the navigation aids tender and light icebreaker 'Alexander Henry'. The ship was acquired in 1984 when it was decommissioned from the Canadian Coast Guard. Her role had been to keep the channels out of Thunder Bay at the head of the Great Lakes clear of ice so that all loaded ships could get out before the winter freeze and to open the passages again at the end of winter. In the summer she maintained navigation aids in the lakes.

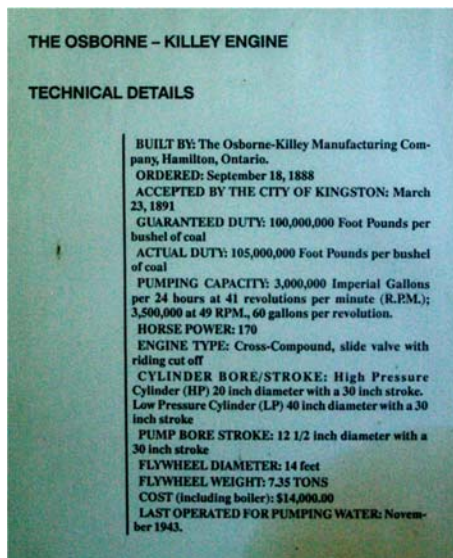


Town Hall - Kingston

At 27 Ontario Street is the Pump House Steam Museum. Prior to 1850 clean water was a problem for Kingston. Water from wells and the lake was often contaminated and illness was endemic. In 1849 the Council bought stock in a company in return for clean water to the market, 20 hydrants in the streets and public buildings. Private customers could also hook up to the system. Water was pumped from the lake to a dugout reservoir above the town



Alexander Henry



Now a museum ship she also serves as a B&B. Cabins are available on board.



The Osborne - Killey Engine - Pumphouse Museum



St George's Cathedral - Kingston

<http://www.marmus.ca/marmus/phsmtext.html>

In 1887 the company was taken over by the Council and in 1890 a new engine house was built to house the new horizontal steam engines that were to replace the vertical beam engines. These engines are on display in their original location. The museum also has a model railway display and many small steam engines.



Rideau Canal - Kingston Mills



Block House - Kingston Mills

After the war of 1812 it was feared that there could be another war with the Americans. The British new that they could not defend the whole of the border with America and Wellington proposed that a mobile army was the only solution. His proposal include building canals connecting major waterways so that troops could be easily moved to wherever they were needed.

The Rideau Canal was one such venture, connecting Kingston on Lake Ontario with Ottawa and the Ottawa River via the Cataraqui River, thus providing an alternative route to Montréal.

<http://www.geocities.com/naforts/on3.html>

The first locks are at Kingston Mills where there is also a defensive blockhouse to protect the locks from attack. The canal was never used for its military purpose, but became a boon to farmers and others wanting to get their goods to market.

http://www.pc.gc.ca/lhn-nhs/on/rideau/index_e.asp

Today the canal is used for recreational boating and in managed by the Canadian Parks Service.



Rideau Canal - Kingston Mills

Sunday 03 July 2005 - Kingston to Toronto

Day 12

Except for a planned to departure from Kingston at about 07:00 for Toronto I have no idea what Edeleyne Tan and John Townsend have in mind when I get there.

However as I am about to leave the motel Michèle Murphy calls to say she is in Toronto and maybe able to stay over.

The three hours drive along Highway 401 is not very interesting, generally wooded flat country, long straight stretches of highway and occasional glimpsed of Lake Ontario.

On my arrival at the hotel at 10:30 I am lucky to find my room is ready and I can check in.



Crowds in Chinatown

As arranged I call Ed and find they are all at the Queen's Quay Building on the waterfront near the Weston Hotel where Sue and I had stayed in 1996. I knew the place, as I had explored most of the waterfront while Sue was at the Home Economics Conference in the hotel.

A 25 minute walk and there they all were, the Canadian contingent from last year's trip to Peru. We grab some coffee and head off to walk past the CN tower, the Skydome, now named the Rogers Stadium, the new City Hall buildings to Chinatown for lunch.

City Hall & Nathan Phillips Square: The City Hall and Nathan Phillips Square

Written by [Paul2001](#) on February 21, 2005.

Back in the late 1950's it was decided by Nathan Phillip's, the first Jewish mayor of Toronto that it was necessary to build a new administrative building to run the city's affairs.

A world-wide contest was held for the design. It was won by Finnish architect, Viljo Revell who sadly did not live to see the new City Hall's opening on September 13, 1965. The building consists of two carved concrete towers that surround a flying saucer shaped chamber where the local city council meets. This chamber seats 300 people so if you want to see Toronto's local elected officials in action, then feel free. Before the City Hall a square has been laid out now named after Mr. Phillips. The square is very busy with

locals from the business district who come here to relax during the lunchtime period on hot summer days. There is a large reflecting pool in the square which during the winter month is turned into a skating rink that is very popular. Skates can be rented at a kiosk. There are also several gardens spread out throughout the square and a large sculpture created by Henry Moore known as "The Archer". Festivals and concerts are frequently held in the square. This includes the Toronto Jazz festival that is held in late June. On the downside,

the square has been inhabited by scores of homeless people of late. However recent legislation has been passed that will hopefully clean up this problem.

http://www.virtualtourist.com/travel/North_America/Canada/Province_of_Ontario/Toronto-903418/Things_To_Do-Toronto-City_Hall_Nathan_Phillips_Square-R-1.html



New City Hall and Nathan Phillips Square

Plan B is a short walk to Hemingway's, not the same view, but very pleasant where we chat until it is time



CN Tower - Toronto

for Michèle to catch the bus to Kingston.

Ed has plans for dinner at an Ethiopian restaurant so we make our way slowly down through the University of



Jazz Festival - Toronto

Toronto campus, fortunately towards the hotel, to the restaurant.

Chinatown was packed with people buying fruit and vegetables and all sorts of things from street stalls in front of the shops.

The Dim Sum was excellent and after lunch we continued our walk through the city and by 15:30 we are all in need of a drink. Michèle is feeling the effects of an overnight flight from Anchorage via Vancouver. We head for the roof top bar on the Manulife Building in Bloor Street only to find it doesn't open until 17:00.

Dundas Square, at the corner of Yonge and Dundas Streets, features 'splash fountains' that are programmed to provide a varying display of vertical jets of water. It is a hot day and many are cooling off in the dancing water.

http://en.wikipedia.org/wiki/Dundas_Square

The food was served on a large platter, seven or eight different dishes, some highly spiced and sheets of thin bread. The bread was soft and similar in surface appearance to a crumpet.

The food was delicious and the meal finished with strong coffee made from freshly roasted beans and served from a traditional Ethiopian coffee pot.

It was time for Ed to go home and John and I return to the hotel.

Who knows when we will meet again? It was wonderful to meet up with fellow travellers and reminisce about our trip to Peru and other adventures.



The 'perfect city car'



Hemingway's



'Splash Fountains' - Dundas Square



Residence in central Toronto



Toronto Island Park - CN Tower in the background

I estimate I walked about 10km yesterday.

John is not returning home until the 17:15 train so we have the day to look around together. John had studied in Toronto and I had had a good look around on the previous visit with Sue so we decided to walk down Yonge Street to the ferry wharf and go to Toronto Island Park.

We bought some breakfast on the way.



Toronto Island Park

<http://www.city.toronto.on.ca/parks/island/index.htm#about>

The islands are quite large and protect the Toronto harbour from the seas, which can build up on Lake Ontario. They also provide sheltered water for sailing classes conducted by the Royal Canadian Yacht Club.

<http://www.rcyc.ca/>

There are three yacht clubs on the islands and many recreational facilities including a children's farm.

We took the ferry to Centre Island and spent nearly 4 hours exploring the eastern end of the park; Centre Island, Ward Island and Algonquin Island. Both of us were interested in the array of yachts at the Queen City Yacht Club and the Royal Canadian Yacht Club moored in the protected waterways between the islands.



Toronto Island Park

At the eastern end of Ward Island and on Algonquin Island there are many holiday cottages. Some are new and in excellent condition, many older ones are well maintained, but there are many that are in need of a major overhaul.

This is prime real estate 20 minutes by ferry and bicycle from the heart of Toronto. Who knows what one of these properties are worth.

Of course, in winter the lake can freeze and access may be difficult, but in summer it is a perfect retreat from the concrete jungle that is Toronto. However as there are some permanent residents on Ward Island the ferry runs to Ward on a reduced schedule from September to May.

On our return to the mainland we stroll along Queen's Quay West. It is hot, humid and threatening a thunderstorm so we find a place for a beer and a rest before John catches the train.

It is soon time to walk to Union Station and after John departs I walk back to the hotel at Carlton Street. On the way there is a sudden downpour. It doesn't last long, but in the suburbs this flash

flooding and considerable damage from the thunderstorm.



Sail Training Dinghies - Toronto Island Park

I estimate I have walked between 12 and 15 km today; good practice for the camping trip next week.



Cottage - Ward Island - Toronto Island Park

Tuesday 05 July 2005 - Toronto to Hamilton

Day 14

Today's departure was delayed until after the morning rush hour in the city and although the highways were busy they were flowing at 10 to 15 kph above the speed limit and the trip to David and Barbara Trew's home at Waterdown took about 45 minutes.

Waterdown is on the outskirts of Hamilton, a steel town, on the shores of Lake Ontario, not far from Niagara Falls.

David has a plan for the day; firstly to go to a nearby farm and pick strawberries for the evening meal. It is still hot and humid, as it has been for the last two weeks.

After a light lunch David and I drive to the old harbour side to the new Canada Marine Discovery Centre run by Parks Canada. The centre is mainly designed to engage children in learning about the ecology of the Great Lakes, their formation, threats to the lake environment and the role the lakes play in the life of those who live around it.

http://www.pc.gc.ca/canada/decouvertes-discovery/index_E.asp

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Canada Marine Discovery Centre



HMCS Haida

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http://www.pc.gc.ca/canada/decouvertes-discovery/index_E.asp

It is a very good display and unlike some museums I have been in lately the interactive computer displays actually work.

Nearby is the last Tribal Class destroyer, HMCS Haida, which saw service in the Arctic, English Channel, Normandy and the Bay of Biscay during WWII and Korea in 1952-53.

Sixteen Tribal Class destroyers were built for the Royal Navy, eight for the Royal Canadian Navy and three for the Royal Australian Navy.

http://www.pc.gc.ca/lhn-nhs/on/haida/index_e.asp

<http://www.hmcshaida.ca/>

The ship is complete in most respects and interesting to visit as an example of a WWII fighting ship and the rigours associated with them. The total crew of about 250 men would have been very cramped and very uncomfortable on the Arctic run to Murmansk.



HMCS Haida



HMCS Haida - Forward Guns



Canada Marine Discovery Centre

Wednesday 06 July 2005 - Kingston to Buffalo

Day 15

After spending the morning with Barbara and David I head off to Buffalo via Niagara. The route crosses the Niagara River via the Rainbow Bridge just downstream from the Falls so there is a good view of them. As US immigration and customs are at the end of the bridge and the queues are long and moving slowly I have time to appreciate the view.

http://www.niagarafallslive.com/Facts_about_Niagara_Falls.htm

Approaching Buffalo the directions to the airport are clear and I am soon at the motel. After clearing all my stuff out of the car and refuelling I drop the car at the Hertz depot 100m from the motel.



This view can be seen from the Rainbow Bridge: Photo by Liam Quinn

<http://www.htmlhelp.com/~liam/>

Thursday 07 July 2005 - Buffalo to Vancouver

Day 16



R Tucker Thompson



Lady Washington



Cuauhtemoc



A very early start is required. The flight to Chicago to connect with the flight to Vancouver departs at 06:00 and check in is 1½ hour before departure. Motel shuttle gets me there without problems.

Flights are uneventful and arrive in Vancouver at 11:20 and when I finally clear immigration and get my bag Nancy is waiting for me.

The Sea Vancouver festival starts today. The first event is a sail past by the tall ships participating in the event.

Having noted my interest in things maritime, Nancy has plans to watch the sail past. We find a vantage point at Jericho Point where we can watch the ships. The weather is fine but the

wind is light and unfavourable so the ships are delayed. Nevertheless a spectacle as some of the largest sailing ships afloat sail by surrounded by smaller sailing vessels. The highlights are the Russian ship 'Pallada' at 108m long and the Mexican 'Cuauhtemoc' at 82m.



Pallada

<http://www.portalbernitallships.ca/ships.htm>

Nancy has also arranged tickets to board some of the ships on Saturday.

When the sail past is over Nancy drops me at the Museum of Anthropology in the University of BC. The spectacular building houses a teaching museum featuring the culture of the First Nations Peoples of the Northwest Coast. There is an overwhelming collection of artefacts from the region.

<http://www.moa.ubc.ca/>



Musqueam House Posts

Musqueam House-Posts

The Musqueam and their predecessors on whose traditional territory you now stand have been here for an estimated 10,000 years. Musqueam artist Susan Point found inspiration in two 19th century house-posts from her home community and interpreted them into a contemporary context. In Musqueam, art was created out of individual inspiration and most often viewed by those inside a house.

The house-posts hold roof beams which would support rafters. They in turn supported long interlocking planks of red cedar which formed the roof of the house. As you pass through this house and view the water and mountains beyond, you will have an opportunity to reflect on those who have been here in the past and who continue to create for the future.

In consultation with Musqueam, Royal Bank Financial Group commissioned the house-posts, to mark its 100th anniversary of banking in British Columbia. The house-posts were unveiled on March 3, 1997 in the presence of John E. Cleghorn, Chairman and Chief Executive Officer, representatives of the University of British Columbia, Susan Point, Musqueam Elders and representatives of the Musqueam Band Council and Cultural Committee.

The logs for the house-posts were donated by International Forest Products Ltd. Site installation was made possible with the generous support of members and friends of the Museum.

Perhaps the most impressive feature is the active involvement of the First Nations People in the Museum and the way traditional artistic activities have been revived and encouraged. Work by contemporary artists is displayed alongside the work of their forbears.



Haida artist Bill Reid's acclaimed sculpture, *The Raven and the First Men*, is displayed in the Rotunda Gallery, alongside four exhibit cases

featuring a selection of Reid's smaller masterworks in gold, silver, argillite, and wood. With the assistance of several other artists, Reid created his massive sculpture out of a giant block of laminated yellow cedar. Depicted is a moment in the ancestral past of the Haida people when Raven, a wise and powerful yet mischievous trickster, has just found the first humans in a clam shell on the beach, and is coaxing them out of it.



Museum of Anthropology

The Raven and the First Men was commissioned by Walter and Marianne Koerner, and unveiled by HRH the Prince of Wales in 1980. Members of the Haida Nation were also present to celebrate the work, bringing the sand at the base of the sculpture from the beach where Raven is said to have made his discovery.

http://en.wikipedia.org/wiki/Bill_Reid

During his lifetime (1920-1998), Reid drew much from the traditions of his predecessors, including Charles Edenshaw (ca. 1839-1920), becoming internationally renowned for his extraordinary imagination and technical skill. He continues to inspire new generations of Northwest Coast artists - including Robert Davidson and Jim Hart - who are now masters in their own right.

His most magnificent works are two large bronze sculptures, each depicting a canoe filled with human and animal figures: one black, *The Spirit of Haida Gwaii*, at the Canadian Embassy in Washington, DC, in the United States and one green, *The Jade Canoe*, at Vancouver International Airport, in British Columbia.



The Raven and the First Men - Bill Reid



Suspension Bridge - Lynn Canyon

It is raining. The forecast is for the weather to improve next week. I hope so!

The morning is a write off except for a necessary haircut. However the rain clears in the afternoon and we head off to Lynn Canyon Park on the north side of Vancouver.

<http://www.dnv.org/ecology/>

Capilano is the canyon that most tourists visit and has that feel about it. Lynn Canyon is where the locals go to enjoy the forest and the

rushing water below the 100-year-old suspension bridge. The recent rain has swollen the river and the water is rushing through the canyon and the pools where people sometimes bathe in the summer.



Tall Trees - Lynn Canyon Park

The 616 acre park is forested with lush second growth rainforest and streamside vegetation. The park contains many hiking trails varying in length and difficulty.

The original forest, which was centuries old, was logged in the late 1800's to early 1900's.



Rushing waters - Lynn Canyon



Tangled roots - Lynn Canyon Park

There is also a visitor centre designed to help visitors understand the life cycle of the forest and the impacts of human habitation and use of the forest. The displays are very good.

Granville Island, once an industrial site is now a major tourist location with shops, market, buskers, artists and craft workers and a working boat yard that you can stroll through. Nancy's favourite chicken supplier is on the island so we make a quick call to pick up chicken pieces for chicken soup for tonight's dinner. A friend and Nancy's brother are coming for dinner.

I had a most enjoyable evening with them.



Stairway to the Bridge - Lynn Canyon Park

Saturday 09 July 2005 - Vancouver

Day 18



Jericho Pier

Today is the day Nancy has tickets for the Sea Vancouver festival that will admit us to the festival events and the ships.

We arrived at Jericho Pier just before 11:00; the opening time, to discover the first shuttle to the Tall Ships Island has just left.

However the 'Cuauhtemoc' and the 'Bill of Rights' are moored alongside and we are able to go aboard and inspect them.



Tall Ship Island - 'Pallada', 'Lynx', 'Lady Washington', and 'Zodiac'



Aboard the 'Lynx'

The 'Cuauhtemoc' is a 91m Barque. She is a Mexican Navy training ship and has a crew of 190, including 90 cadets. She was built in 1982.

The 'Bill of Rights' is a 126ft gaff Topsail Schooner.

We are not expecting the shuttle to return until 12:30 and decide to have a quick cup of coffee at the Jericho Sailing Centre and watch activities for a while. We are half way through our drinks when the shuttle reappears and it is time to get in line to board.

A 25-minute trip across the harbour and we dock at the Tall Ship Island. The island has been constructed by mooring two very large barges in the harbour to which the ships can be moored. This allows good access to the ships and controls the crowds as they are limited by the capacity of the shuttle ferries to bring people to the island.

We have about an hour to inspect the four ships berthed here, the 'Lady Washington', the 'Lynx', the 'Zodiac' and the 'Pallada'.

The 'Pallada' is a Full Rigged Ship based in Vladivostok and makes regular cruises in the Pacific Ocean with a complement of cadets. She visited Perth and Hobart in 1998. She was built in 1988; at Stocznia Gdanska, Gdansk, Poland. At 356 feet LOA she is the largest ship in the fleet with a crew of 56 and 90 cadets.

The 'Lady Washington' is a replica of a 90 ton trading vessel of the same name built in 1750. A

Brig, she is 87 feet LOA and was built in 1989; at Aberdeen, Washington, Grays Harbour.

The 'R Tucker Thompson' is a Topsail Schooner, 85 feet LOA and was built in 1985; at Whangarei, New Zealand, Todd Thompson and the Harris family. Designed by Todd Thompson.

The 'Lynx' is a Topsail Schooner designed and built to interpret the general configuration and operation of a privateer schooner or naval schooner from the War of 1812. She was built in 2001 in Rockport, Maine and is 78 feet LOA.



On board the 'Bill of Rights'



Main mast of the 'Cuauhtemoc'



'Pallada'



Nancy on the forepeak of the 'Cuauhtemoc'



Aboard the 'Lynx'

The 'Zodiac' was built in 1924; at Hodgdon Brothers Shipyard, East Boothbay, Maine. Built for the heirs to a manufacturing fortune, Zodiac was designed to epitomize the speed and beauty of the American fishing schooner.

She continued her working life as a Bar Pilot schooner in San Francisco. She was the last American schooner still working in that capacity in the United States when she retired from the bar in 1972. At 160 feet LOA she is the largest working schooner on the West Coast of the USA and Canada.

We returned to Jericho Pier and then home for a bite to eat. We went out again to one of the entertainment areas near the Casino. The musical group was good but the rest was not very interesting, mainly food stores and a few boats and cars. The walk round the area, which is undergoing redevelopment was most interesting, as this was an area near where Sue and I and Ian and Margaret had stayed in 2001. Development had started, but it was a run down industrial area then.



Science Centre from Cambie Street Bridge

Sunday 10 July 2005 - Vancouver to Nairn Falls

Day 19

Rocky Mountain Explorer--Day 01

Depart YWCA, Beatty Street Vancouver about 09:00 and head across the Lion's Gate Bridge along Highway 99, the Sea to Sky Highway, toward Squamish and Shannon Falls and spectacular climbing cliff called on Stawamus Chief Mountain.

<http://www.britishcolumbia.com/region/s/towns/?townID=3945>

Shannon Falls is composed of a series of cliffs, rising 335 meters above Highways 99, making it the

third highest falls in the province, ranking behind 481 metre Della Falls in Strathcona Provincial Park on Vancouver Island and 396 metre Hunlen Falls in Tweedsmuir Provincial Park near Bella Coola. The Chief rises over 600 metres above Highway 99 at Squamish. Its great vertical faces result from glacial erosion along fractures in the granite.

<http://www.britishcolumbia.com/ParksAndTrails/Parks/details/?ID=402>

<http://www.shannonfalls.com/>
<http://www.chiefguide.com/chief.html>

Lunch stop is by Rainbow Park, Alta Lake, at Whistler.



Ryan, Fiona, Grace and Katie - Shannon Falls



Rainbow Park - Alta Lake



'The Chief'



Climbers on 'The Chief'



Shannon Falls



'Salmon' at the Gondola Top Station



Nairn Falls

<http://www.sharphooks.com/tripplaner.aspx?subpage=lakeinfo&lakeid=7>

Very pretty spot with excellent views of the mountains, particularly Whistler and its many ski runs and chair lifts.

The Whistler village nestles in the valley below the mountain peak nearly 1600m above. Whistler Peak is at approximately 2100m and it can be reached by a Gondola lift and then a chair lift. The last stage is seems a similar rise in elevation to that from Thredbo Village to the top of the chairlift.

<http://www.whistlerblackcomb.com/index.htm>

Views from the top are spectacular in all directions. There is still plenty of snow on the higher slopes.

We walk back to the Gondola lift a; takes about 45 minutes down a road that is very steep in parts.

Mountain biking on Kosciuszko may be spectacular; here some of the tracks are frightening. In the summer one of the lifts is dedicated to taking bikers to the top. There are hundreds of them.

The Whistler Village is colourful in summer with brightly coloured flowers everywhere. In the winter the colourful buildings and snow must also be very beautiful. The resort was first opened in 1986.

At around 17:00 we head for our overnight camp near Nairn Falls, a few kilometres from Pemberton.

<http://www.britishcolumbia.com/ParksAndTrails/Parks/details/?ID=50>

First task is to set up camp, then prepare dinner; pasta and sauce. After cleaning up we take the 2km walk to the Nairn Falls. The river is high and water is roaring over the falls that are a series of cascades.

At 22:00 it is still light but it is time to test the camping gear.



Whistler Peak



The road down



View from the Peak



Entertainment in the Square - Whistler Village

Rocky Mountain Explorer - Day 02



Wildflowers - Joffre Lakes
Provincial Park

A reasonable night sleeps; apart from the freight train that passed nearby during the night.

Today is a long driving day as we head towards the Mount Trophy Buffalo Ranch near Clearwater; gateway to the Wells Gray Provincial Park.

<http://www.britishcolumbia.com/ParksAndTrails/Parks/details/?ID=277>
<http://www.buffaloranch.ca/>

Our route takes us through Pemberton, the Currie Native Reserve, the Pemberton River Valley, Lillooet, Clinton, Lone Butte, and Little Fort.

Soon after leaving we stop for a short walk to the lower lake of Joffre Lakes Provincial Park where there is a magnificent view of the mountains and the Joffre Glacier Group towering over the park.



Breaking camp - Nairn Falls



The Truck

<http://www.britishcolumbia.com/regions/towns/?townID=3563>
http://www.bcafn.ca/of_interest/mtcurrie.htm



Reflections - Joffre Lakes Provincial Park

On the way we make several short stops as we pass through the coastal mountains.



Forest Fungi



Roadside flowers

Near Lillooet is a complex of three lakes forming a hydroelectric scheme. The lake is only 800ft above sea level,

but the surrounding ranges soar to seven to nine thousand feet.

<http://www.bchydro.com/recreation/southern/southern1201.html>

<http://www.cayoosh.net/seton.html>



Joffre Lakes Provincial Park



Lake Seton

At Little Fort we enter the North Thompson River valley and the Trans Canada Yellowhead Highway #16.

<http://www.yellowheadit.com/content/guest/guest-index.html>

We arrive fairly late and set up camp. It has been raining on and off all day and the site is pretty wet. Fortunately it is not raining while we set up camp and prepare dinner. Wet (and green) firewood makes it very hard to get the campfire going. Finally all is prepared and dinner is served and we head for our tents as soon as everything is packed away.

Tomorrow we will head up the Clearwater River to Clearwater Lake where we will take canoes further up the lake to a campsite.

We can only take daypacks so gear selection is important, particularly as the weather is not looking good.

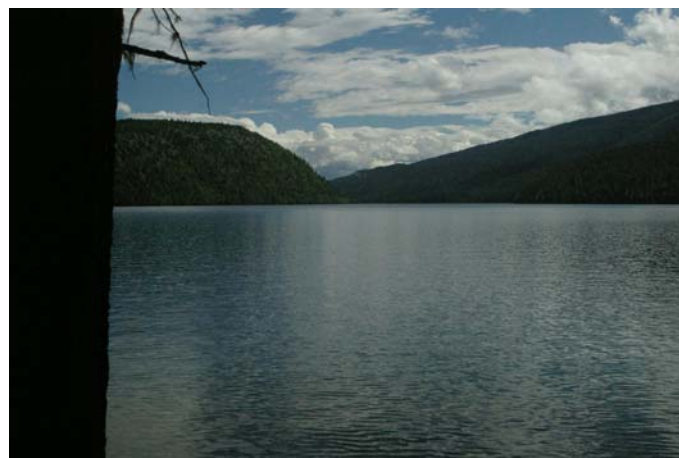


North Thompson River

Rocky Mountain Explorer - Day 03**Forest Pool - Trail to Eagle's View**

The weather is OK when arise in the morning and breakfast is over and our gear packed when our guide, Steve, arrives at 09:00 to escort us to where the canoes are located beside the lake.

The trip is only about 45 minutes and we are soon unloading supplies from the truck and loading them into 3 canoes. Each canoe has 2 people aboard.

**Campsite - Clearwater Lake****Clearwater Lake**

As soon as everything is ready we paddle across the lake and then upstream to a picnic spot for lunch. Showers are starting to fall and the sky is not looking good.

After lunch we paddle on for about an hour to our campsite beside the lake. We arrive mid afternoon and it looks like the rain is setting in. The ground is wet, the trees are dripping and the firewood is saturated.

**View from Eagle's View**

We set up our tents as best we can in the rain, while trying to keep the inside as dry as possible. A tarp is set up over a picnic table to provide shelter for a kitchen.

Our afternoon expedition is a climb to the 'Eagle's View', a lookout point on the escarpment 300m above the campsite. We take about an hour to climb up through the forest. Everything is wet and from time to time it rains. The last part of the climb is very steep and slippery. Everyone made it safely. The view across the lake to the mountains in the distance was worth the climb.

On our return Steve struggles valiantly to get the fire going. He eventually succeeds.



Tall trees



Evening rainbow

As the sun sets there is a brilliant rainbow across the lake.

We are all pretty tired and again as soon as dinner is over and the meal cleaned up we crawl into our tents.



Forest fungi

Wednesday 13 July 2005 - Clearwater to Mount Robson

Day 22

Rocky Mountain Explorer - Day 04



Fungi - Clearwater Lake Campsite



Helmcken Falls

It has been wet all night, however as the sun rises the weather starts to clear and across the lake I spot two deer by the lakeside. They are a long way away and there is no point in trying to get a photo.

We are not in a hurry to leave; however everyone is up early, except our leader, Ryan and after a hearty breakfast we are soon ready to load the canoes and start the trip back down the lake.

It is a magical morning; the lake is calm and the sun is starting to drive away mist that hangs over the lake.

We set off for the two-hour paddle back to the jetty we started from and then into the little town of Clearwater to get fuel and food.



Morning mists on Clearwater Lake

On the way we stop at the Helmcken Falls. Helmcken Falls is Canada's fourth highest waterfall, and one of it's best-kept secrets. Plunging 141 metres in a straight drop, this waterfall is about three times higher than Niagara Falls!

In winter Helmcken Falls develops a bizarre ice cone at its base. It looks a bit like a volcano is swallowing the Murtle River. The ice cone forms over the whole winter as progressive snow and ice layers build up, and by the end of the winter it can be up to 20 stories (~70 metres) high.

<http://www.wellsgray.ca/helmcken.html>
<http://www.britishcolumbia.com/ParksAndTrails/Parks/details/?ID=277>

Our route to Mount Robson takes us along the North Thompson River towards Jasper. We are travelling along the Rocky Mountains Trench between the Coastal Mountains and the Rocky Mountains. This trench extends from California to Alaska

<http://www.britishcolumbia.com/ParksAndTrails/Parks/details/?ID=178>

<http://www.mountainnature.com/Ecology/DefineTheRockies.htm>

<http://www.bartleby.com/65/ro/RockyMts.html>



Buffalo - Mt Trophy Buffalo Ranch

The peak of **Mount Robson** is the highest in the Canadian Rockies, towering 12,972 feet (3954 m) over the western entrance to the park. As well as occupying a portion of the Main (Park) Ranges of the Rockies, the park, one of the oldest in British Columbia, also contains the headwaters of the **Fraser River**, and, in the northwest section of the park, the massive **Berg Glacier**, notable for being one of the few living (or advancing) glaciers in the Canadian Rockies. Before the discovery of Mount Waddington on the central coast in 1925, Mount Robson held the distinction of being the tallest mountain in British Columbia.

We arrive a little late due to a delay in Clearwater so dinner is a little late. Grace and I are cooking tonight and we have wine to marinade the steaks (and drink) and we serve up a very nice meal of steak, fried onions, boiled potatoes and carrots.

We are all very tired and are soon asleep after dinner.

Tomorrow is our first long walk.

Thursday 14 July 2005 - Mount Robson

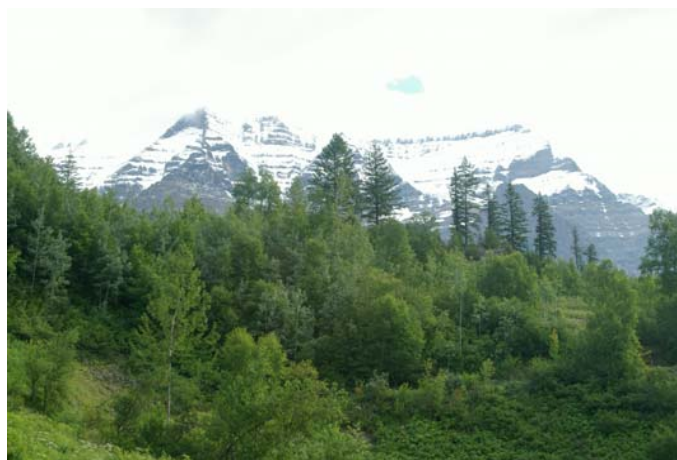
Day 23

Mount Robson is an enormous mountain that rises over 3000m from the valley floor and towers over the surrounding mountains. It is the highest in the Canadian Rockies. Its peak is rarely clear of cloud and today is no exception.



Trail beyond Kinney Lake

Our walk takes us about 10km and over 300m up the Berg Lake Trail; a good test for legs and feet.



Mount Robson

The trail follows the Robson River from the south face to the north face of the highest peak in the Canadian Rockies Mt. Robson. The views are spectacular and the trail ascends through some very unique terrain for the Rockies.

The trail begins in an interior temperate rain forest. Giant western red cedars tower towards the sky in this magnificent old growth forest that appears completely out of place with the rest of the Rockies. With such a massive peak nearby, prevailing air masses are lifted over Robson, condense and rain with the frequency and intensity of a coastal climate. The result is this unique plant community.



Robson River



Kinney Lake



Robson River

It is an easy walk through the forest to Kinney lake. Along the way avalanche paths crossing the trail are rich in blue berries that makes for good bear habitat, and berry picking. One avalanche path down the great coulour on Mt. Robson ran all the way to Kinney Lake. The terrain near the lake caused the avalanche to become airborne and many of the great cedars are shattered like toothpicks ten metres above the ground. Today new growth hides most of the old scars and the frightening display of power is all but hidden. (There is no risk of avalanche activity on the trail in summer.) Past the lake, the trail follows a broad open valley with a braided stream.

<http://www.mtrobson.com/html/hiking.html>

No problems! A most enjoyable days hike through the forest beside the Robson River and the Kinney Lake. Our lunch stop and furthest point up the trail was at the top of the alluvial fan at the head of Kinney Lake. Here we spent a little time exploring the fan and discovered a number of tracks, possibly wolf, elk, deer or big horned sheep. No animals to go with the tracks.

My feet and legs are pretty tired, but no blisters; the boots from Peru are doing a great job.



Fiona and Katie

Friday 15 July 2005 - Mount Robson to Jasper

Day 24

Rocky Mountain Explorer - Day 06

We wake to another rainy morning. We breakfast and break camp early so that we can be in Jasper by 10:00. Fortunately the rain stops for long enough to get the tents down and shake off the water.

It is about 100km from Mount Robson to Jasper along the Yellowhead Highway that is part of the Trans Canada Highway and we reach Jasper in time for the trucks brakes to be checked.



'Bluebells' - Maligne Canyon

Jasper is a town administered by the National Parks and is the centre of the Jasper National Park Administration. Growth is controlled and only residents can live there. People cannot acquire summer houses and so the town growth is restricted. There are about 5000 permanent residents. In the summer tourists may swell the population to 20000.

http://www.pc.gc.ca/pn-np/ab/jasper/index_e.asp



Falls - First Bridge - Maligne Canyon

The town is also a major centre for the Canadian National Railway. Enormous freight trains, 2km long, pass through frequently from east to west.

The only planned event for the day is to ride the Jasper tramway to the top of The Whistlers, so named for the whistling marmots that inhabit the mountain.

The weather is not promising as the mountain is shrouded in cloud.



A 'small' RV and trailer - Mt Robson

First task is to find a laundromat and get some washing underway. This is no problem and once the washing has started we start to explore the town and shops, particularly those selling outdoors gear. Some of the party need a few items.



Maligne Canyon

The morning passes quickly and after lunch Grace and I head off to the local historical museum.

<http://www.jasper-alberta.com/modules.php?name=Content&pa=showpage&pid=88>



An underground flow joins the river



The river rushes through the Canyon

A small museum, the Jasper and Yellowhead Museum has a very good display tracing the history of the area from the days of the early trappers, through the laying of

the railroads to the establishment of the Jasper National Park and its evolution to what it is today. An excellent film of the local history was also showing.

We assemble again at 16:00; the tramway is shrouded in cloud so there is no point in going up today and instead we head to Maligne Canyon.

<http://www.malignecanyon.com/tour.html>

Maligne Canyon is a very narrow, and in places deep, canyon cut into fissures in the limestone. The river is fed by water from Medicine Lake through underground passages in the limestone. It is believed that there is a very large cave system between Medicine Lake and Maligne Canyon, but so far no one has found an entrance. Medicine Lake empties each summer.

Water from Medicine Lake may take several days to reach the Canyon

Today there is a raging torrent, fed by the lake and unseasonable rain. We walk downstream from Bridge 1 along the top of the canyon to Bridge 5 where our truck is waiting.

We head to our campsite in the Park Camping Ground to find that Ryan has set up our tents and all we have to do is get dinner and go to bed.

Saturday 16 July 2005 - Jasper

Day 25

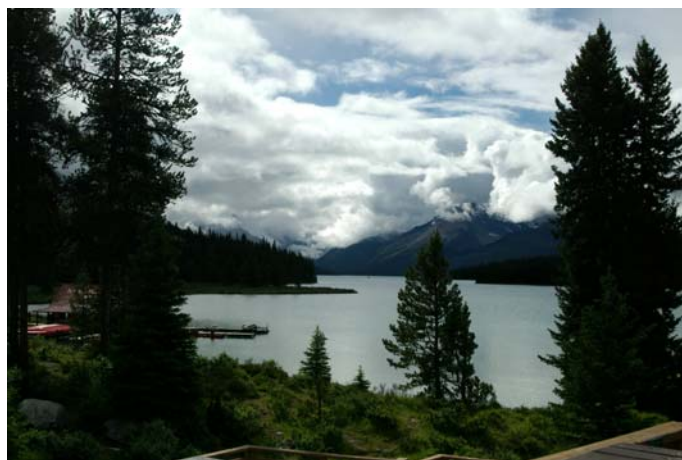
Rocky Mountain Explorer - Day 07



Canada Geese - Maligne Lake



Robin - Maligne Lake



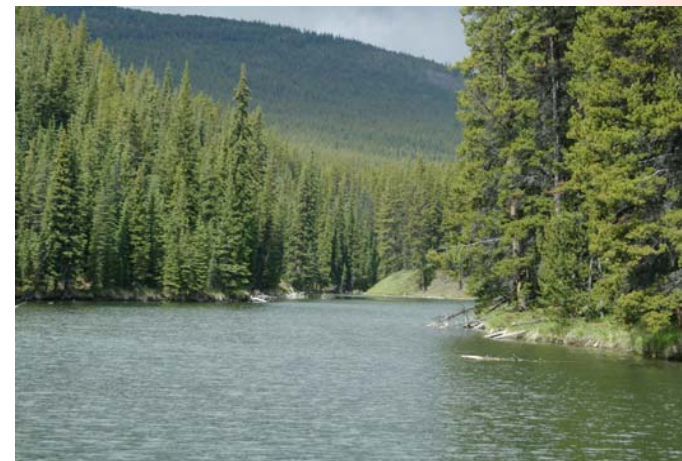
Maligne Lake

We are still hopeful that we will be able to go up on the Jasper Tramway; the morning weather is no good so we head out past the Maligne Canyon and Medicine Lake to Maligne Lake; the second largest terminal moraine lake in Canada.

http://www.pc.gc.ca/pn-np/ab/jasper/visit/visit26_e.asp
http://www.pc.gc.ca/pn-np/ab/jasper/visit/visit37a_e.asp

Facts about Maligne Lake

- Length - 22.3 km
- Minimum - maximum width - 100m to 2km
- Maximum depth - 96m



Moose Lake



Maligne Lake Map

This is a very scenic spot; but our destination is a small lake, Moose Lake, about 2km walk into the forest, where we hope to see moose and other wildlife. It is a pleasant walk and we do come upon a female elk grazing by the lake.

We return to Maligne Lake in time to eat our lunch before heading off to the Miette hot springs. We spend an hour

or so soaking ourselves in the hot mineral waters (40C) and then cooling off in the cold pool (10C).

http://www.pc.gc.ca/regional/sourcesthermales-hotspots/visite/miette_e.asp



Medicine Lake

Returning to Jasper we find the Tramway is clear of cloud, so up we go, 1000m above the Bottom Station for a spectacular view of Jasper Village and the surrounding mountains. There is a strong, cold wind and some of us walk part of the way to the summit 1200m away and 200m higher. It is getting late and colder as we climb so we turn back and head back to the Bottom Station and into town for a most enjoyable meal at the Caruso Restaurant.

<http://www.jaspertramway.com/>

Opened in 1964, the Jasper Tramway is the longest and highest guided aerial tramway in Canada and the only guided aerial ropeway in the Canadian Rockies.

On display near the Railway Station is Canadian National Railways Steam Locomotive 6015 Mountain Type Class

U-1-A. This massive loco is 27.54m long and weighs 261,270kg.

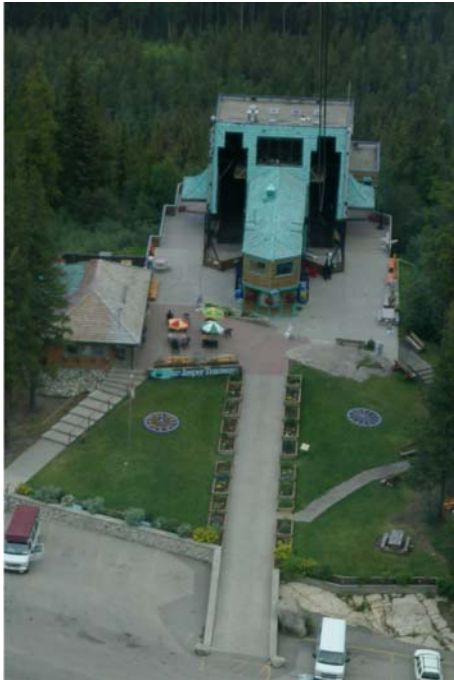
Tomorrow we are going walking on the Athabasca Glacier.



Miette Hot Springs



View from Whistlers



**Approaching the Bottom Station -
Jasper Tramway**

Tomorrow we are going walking on
the Athabasca Glacier.



Top Station - Jasper Tramway



Mountain Type Class U-1-A



Town of Jasper - Caruso Restaurant



Rocky Mountain Explorer - Day 08

We are due to meet the guides for the walk on the Athabasca Glacier at 10:00 so an early departure is necessary in order to give us time to see some of the sights along the way.



Athabasca Falls

Due to unseasonable summer rains the rivers are all very high and falls and rapids are all spectacular. As we travel along the Icefields Parkway we stop at the Athabasca Falls and the

Sunwapta falls for a quick photo stop. Water is roaring over both.



Campground Visitor - Jasper



Columbia Icefield Map

The 23-metre Athabasca Falls is not very high by Canadian Rockies standards, but the size of the river makes it one of the most powerful falls to be found in the mountain national parks. Pouring over a layer of hard quartzite, the falls have cut into the softer limestone beneath, carving intricate features, including potholes and a short canyon.



Below the Athabasca Glacier

Flowing from the glaciers of the Columbia Icefield, the Athabasca River is the largest river system in Jasper. In 1810, David Thompson, Canada's premier map-maker and explorer, plied the Athabasca in search of a viable fur trade route to the Pacific Ocean. Discovering Athabasca Pass in early January 1811, David Thompson's route helped establish Canada as a country that spans the North American continent.

In 1862, the Overlanders traveled along the Athabasca River headed for the Cariboo Goldrush, followed 30 years later by two national railways. Today one railway and a

transcontinental highway follow parts of the river through the park.



Sunwapta Falls



Bernard

Recognized for its historical, natural and recreational values, the

Athabasca was designated a Canadian heritage river in 1989.



Athabasca Glacier

http://www.pc.gc.ca/pn-np/ab/jasper/visit/visit29_e.asp

A torrent of plunging water not far from the Icefields Parkway, Sunwapta Falls is just one of the many waterfalls in Jasper created by hanging valleys.

Hanging valleys were formed when glacier ice receded 8000 years ago, leaving behind broad U-shaped valleys. Larger valleys were carved deeper than smaller ones and in places where the two meet, the smaller valleys "hang" at a higher elevation. This is an excellent place to find waterfalls. At Sunwapta Falls, the smaller "hanging" Chaba Valley and larger Athabasca Valley join in a spectacular stepping waterfall that has carved a deep limestone gorge out of the rock some metres below the footbridge.

http://www.pc.gc.ca/pn-np/ab/jasper/visit/visit31_e.asp

The walk on the glacier is a 4 to 5 hour guided walk on the surface of the glacier. This is an optional activity and everyone is participating. The weather is excellent; fine and a little overcast. Nevertheless we are all wearing

windproof jackets, hats or beanies and sunglasses to protect against the cool wind that falls down the glacier and the sun. We all have additional cold weather clothing in case the weather changes.



Preparing for the glacier walk



Mt Andromeda



Mill Well

The Columbia Icefield is a surviving remnant of the thick ice mass that once mantled most of Western Canada's mountains. Lying on a wide, elevated plateau, it is the largest icefield in the Canadian Rockies. Nearly three-quarters of the park's highest peaks are located close to the icefield; ideally placed to catch much of the moisture that Pacific winds carry across the British Columbia interior. Most of this precipitation falls as snow; up to 7 metres a year!

Since more snow falls in a year than can melt during the short summer season, it accumulates. As time passes, the snow transforms into ice

and begins to flow outward through gaps in the mountains surrounding the icefield, creating great tongues of ice called glaciers.



Brewster Snow Coach



Melt Water rushing down the glacier

The Athabasca is the most-visited glacier on the North American continent. Situated across from the Icefield Centre, its ice is in continuous motion, creeping forward at the rate of several centimeters per day. Spilling from

the Columbia Icefield over three giant bedrock steps, the glacier flows down the valley like a frozen, slow-moving river.



Caves in the ice moraine



Ice Falling from cliff above the Athabasca Glacier

Because of a warming climate, the Athabasca Glacier has been receding or melting for the last 125 years. Losing half its volume and retreating more than 1.5 kms,

the shrinking glacier has left a moonscape of rocky moraines in its wake.

http://www.pc.gc.ca/pn-np/ab/jasper/visit/visit32_e.asp

After a short talk on safety on the glacier by our guide, Bernard, we head off up the terminal moraine. This is a massive pile of rock brought down by the glacier from the Columbia Icefield. It takes about half an hour to reach the toe of the glacier. We strap on simple crampons to help us walk on the ice without slipping.



Ice Fall - Athabasca Glacier

Towering above us are Mt Athabasca and Mt Andromeda. Nearby is Mt.

Snowdome the hydrological apex of North America. Water from here may enter the Columbia River and travel to the Pacific Ocean, the Athabaska River and travel to the Arctic Ocean and the Saskatchewan River and travel to Hudson's Bay (Atlantic Ocean?).

As we climb steadily up the glacier Bernard explains the processes inside the glacier as it forms and slowly moves down the mountain.



Inspecting a Mill Well

Although the mass of ice seems to be relentlessly moving downhill there is continual movement within the ice flow, crevasses form and close, melt water rushes down channels in the ice and sometimes plunges into mill wells that take the water deep into the glacier, sometimes to the rock below.

Small stones heat in the sun and local melting occurs. Large stones protect the ice from the sun and as a result sit on pedestals as the ice around melts. Eventually the ice below the stone melts due to wind action and the stone falls off its pedestal. The lateral moraine appears to be all rock, but is in fact a ridge of ice, covered in rocks,

that cracks and moves slowly along the sides of the glacier. The centre of the glacier moves more quickly.

The walk takes us to the lower icefall and we climb a short way onto it. We have walked about 4km from the car park and are well beyond the point reached by the Brewster Snow Coaches that bring thousands of people to visit the glacier.

We can go no further. We are not equipped to climb through the heavily crevassed icefalls. We would need proper crampons, ropes and other climbing gear to do that.

After a most interesting day scrambling over the ice we head along the Icefield Parkway to our campsite at Johnson Canyon, near Banff.

It is late and we are tired. Camp is set up, dinner is cooked and we head for bed.



Along the Icefields Parkway

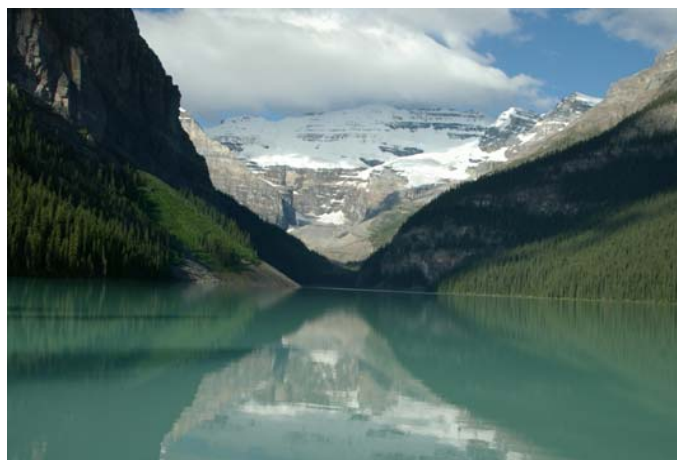
Rocky Mountain Explorer - Day 09**Moraine Lake**

Our first stop this morning is Lake Louise to admire the lake before the hordes of tourist arrive. We are successful and we are able to see the reflection of the glacier in the lake before the wind gets up and waves form on the lake. With the early morning sun on the mountain and the glacier the picture is brilliant.

http://www.pc.gc.ca/pn-np/ab/banff/visit/visit1b_E.asp

<http://www.mountainnature.com/Geology/MountainLakes.htm>

<http://www.banfflakelouise.com/generalinfo/banff.html>

**Lake Louise****Chipmunk - Moraine Lake**

Moraine Lake is nearby and we head there to wonder at the beauty of the lake and the mountains towering over it. The moraine wall that dams the valley and holds back the water of the lake is a huge pile of rubble left there by the melting glacier. The wall provides a marvellous vantage point for photographing the lake, the surrounding mountains and the reflections in the lake.

**Moraine Lake**

We drive back to Banff, arriving at about 11:30, where we will spend the rest of the day, until 18:30 doing what ever we wish in the town. Before dropping us at the Information Centre, Ryan gives us a brief tour of the town, pointing out the places of interest. There are many things to see in Banff and as we were each interested in doing different things we split up. Fiona and Kate had things they wanted to do and Grace and I first set out to get some lunch to eat beside the Bow River.

<http://www.canadianrockies.net/banff/moraine.html>

Lunch devoured we walked along the river to the Banff Park Museum. This Natural History Museum has specimens of the fauna to be found in the park. The building, constructed of local timbers, was built in 1903 to house the collection. Built before electricity was available in Banff, the building is designed to allow a maximum of natural light into the building to illuminate the displays, housed in the original cases.

http://www.pc.gc.ca/lhn-nhs/ab/banff/index_E.asp

Banff exists because of the efforts of 3 fortune seeking young men who discovered and exploited a natural hot spring. The Canadian Government recognised the value of the springs as a tourist attraction and created the first National Park. It was the Canadian Pacific Railway that exploited the potential of site and built the Banff Springs Hotel to house the visitors their trains brought to Banff. The success of this hotel and others like it along the CPR route helped ensure the viability of the railroad.

<http://www.banfflakelouise.com/generalinfo/history.html>



Moraine Lake

Cave and Basin, the original springs are no longer used and are now a World Heritage Site. Additionally the springs are home to a snail found only in a small number of hot springs in North America and extinct at most of the other locations. It is hoped that by conserving the colony at Cave and Basin the snails may be reintroduced at other locations.

Cave and Basin National Historic Site of Canada

Natural Wonders & Cultural Treasures

The Birthplace of Canada's National Park System

The Discovery

That is how William McCardell described the mistfilled Cave when he, his brother Tom, and their partner Frank McCabe first saw it in the fall of 1883. Immediately, their plans began to form. They could build a bathing resort! Become rich! If only they could gain ownership of the springs.

Although they were not the first to discover the Cave and Basin Hot Springs, these three railway workers can lay claim to bringing the springs to public attention. In following their dreams of fame and fortune, they unwittingly helped start Canada's national parks system.

A Park is Born

In the early 1880's Canada's first national park was still an idea, whose chief supporters were the Canadian Pacific Railway and the Government of Canada. Both saw the potential for tourist traffic, the advantages of western settlement, and the prestige that a national park would bestow on a young country.

Arguments over the ownership of the Banff Hot Springs escalated into a legal battle, which the government was called into settle. Recognizing an ideal location and opportunity, the government solved the dispute in 1885 by declaring that the springs would belong to all Canadians--as part of Canada's first national park.

http://www.pc.gc.ca/lhn-nhs/ab/caveandbasin/index_E.asp

About the Hot Springs

Where does the water come from?

Most of the rain and snow that falls on the slopes of Sulphur Mountain ends up in the Bow River. Some of it, however, filters down through cracks and pores in the mountain rock, pulled by gravity to a depth of 3 kilometres (2 mi.) below the surface. It is this water, which later returns to the surface in our hot springs--read on to find out how...



Banff Springs Hotel



Banff Park Museum



Bow River - Banff

Why is it warm?

As it descends the water becomes hotter and hotter--heated by the earth's molten core. Like water in a coffee percolator, when boiling it is under greater pressure and must seek a route back upward. Depending on how quickly the water is able to rise to the surface, and the degree to which it mixes with cold ground-water, Banff's springs have different temperatures: hot at the Upper Hot Springs, and warm at the Cave & Basin.

Why does it smell?

When the water becomes heated, it is able to dissolve minerals from the surrounding rock. Pyrite and gypsum are two common sulphur-bearing minerals dissolved in Banff's hot springs. The rotten egg odour (hydrogen sulphide) is produced when these dissolved minerals are broken down by sulphate-reducing bacteria in the water, before it comes to the surface.

Where does it go?

Once at the surface, the spring water flows down the lower slopes of Sulphur Mountain towards the Cave & Basin Marsh. Along the way, and in the marsh itself, this warm mineral water creates a rich oasis for a diversity of plant and animal life.

Banff Springs Snail

http://www.pc.gc.ca/apps/dci/source/more_e.asp?sitename=bnp&theme=sr&btn_state=Text%20Tour&fs=3d_e.asp



Snail Pool - Cave and Basin

Canada's original National Park, Banff is home to a rich diversity of wild plants and animals. Many, such as the woodland caribou, wolverine and grizzly bear, are species at risk. However, the most endangered species in the park is the Banff Springs snail (*Physella johnsoni*), a remarkable mollusc found nowhere else on earth.

The snail went undiscovered until 1926, largely because of its low-key look and secretive way of life. Although larger Banff Springs snails reach about the size of a kernel of corn, most grow to about half that size. Nearly all are found in areas where warm water bubbles out of the ground.



Stairs to the Eagles Eyrie

Most easily spotted clinging to algae, sticks or rocks at the water's surface, the dark-eyed snail has a reddish, sometimes faintly striped shell. Unlike other freshwater snails in North America (whose shell spirals to the right), the shell of the Banff Springs snail spirals to the left - a feature unique to the Physidae family.

In 1997, the Banff Springs snail became the first living mollusc to be listed by the Committee on the Status of Endangered Wildlife in Canada.

(COSEWIC). In 2000, COSEWIC upgraded the snail's status from "threatened" to "endangered." However, if we are to conserve this mysterious mollusc, we must learn how it survives in this extraordinary environment and what role it plays in the web of life.



Flowers - Cave and Basin

The afternoon is moving on and Grace would like to go the hot springs near the Sulphur Mountain Gondola, so I decide, enough museums and catch the local bus to the Hot Springs and the Gondola. The Gondola takes you almost to the top of Sulphur Mountain. From there it is a climb to the top up a series of stairs. The views in all directions

a breathtaking, especially as a howling gale is blowing.

<http://www.banffgondola.com/default.asp>



Shortly after returning to camp thunderheads start to build and it looks like a thunderstorm is brewing.

Sure enough we are hit with thunder and lightning and rain and hail. It doesn't last long. Again we will have to fold wet tents in the morning.



Banff Springs Hotel



Top Station - Sulphur Mountain Gondola

Tuesday 19 July 2005 - Yoho National Park

Day 28

Rocky Mountain Explorer - Day 10

Today we have another big hike.

http://www.pc.gc.ca/pn-np/bc/yoho/visit/index_e.asp

http://www.pc.gc.ca/pn-np/bc/yoho/activ/activ17_e.asp

Yoho National Park is a short distance from Johnson Canyon. Nevertheless we make an early start so that we can visit the spectacular single drop of 254m Takakkaw Falls. The total height is 380 m.

The melt water from the Daly Glacier and the Waputik Icefield tumbles from the rim of the gorge to a ledge about one third of the way down and plumes out from the wall, creating an enormous rooster tail and clouds of mist.

<http://www.world-waterfalls.com/waterfall.php?num=85>
http://www.waterfallswest.com/bc_takakkaw.html



Takakkaw Falls

Our walk starts at Whisky Jack Falls at an elevation of about 1450 metres and crosses the Yoho Pass at just over 1800m and then descends to around 1400m at Emerald Lake.

http://www.waterfallswest.com/bc_whiskyjack.html

As we walk we have views of the Takakkaw Falls and the Icefields, Hidden Lake and Yoho Lake near the top of the pass.

Our descent first takes us through the forest, revealing the falls bringing water from the Emerald Glacier to Emerald Lake below, and onto the

rock cone formed by falls from the nearby cliffs. This is rough walking.



Waputik Icefield



Yoho Lake

Finally we finish the walk by crossing the alluvial fan and rounding the lake to the resort. The 12km walk has taken us nearly 5 hours, including a break for lunch. It has been a pleasant day for walking and there are many great views of the surrounding mountains, Mt Wapta and Mt

Burgess in particular, waterfalls, and the Burgess Shales, a very rich site for fossils.

<http://www.burgess-shale.bc.ca/history/history.htm>



The President





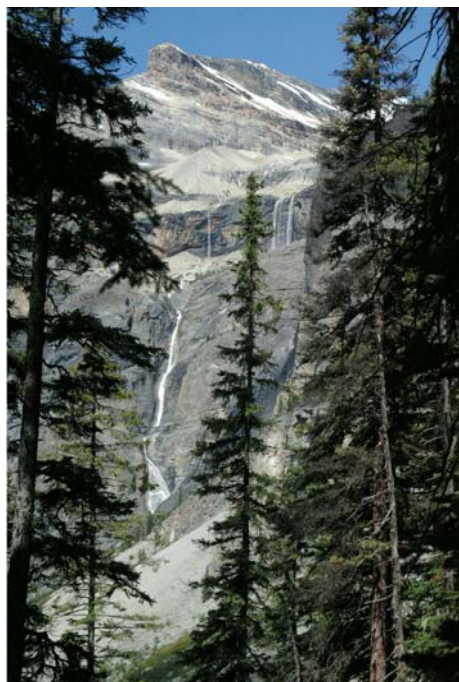
Emerald Lake



Mt Burgess



Emerald Lake Resort



Emerald Glacier and Falls



Natural Bridge



Bear Spray



Trail Map - Yoho Pass

Normally; Ryan carries the Bear Spray, a very strong capsicum spray. Today he is ferrying the truck so I have it in case a bear appears and is not

frightened by the noise we make walking along the trail.

We finish the day at Natural Bridge where the full flow of the Kicking Horse River flows through a very narrow natural channel in the rock.

Tonight our campsite is at the Beaver Foot Lodge. A very rural campsite, we are camped well away

from the amenities; it is nevertheless a very beautiful place.

Wednesday 20 July 2005 - Golden

Day 29

Rocky Mountain Explorer – Day 11



**Katie, Ryan, Jim
Grace, Fiona**

It has been dry all night. I wake at 05:30 to hear the horses that have been roaming the field all night, foraging through our rubbish and gear. Apart from spreading rubbish everywhere, no harm has been done.

It is a beautiful crisp morning and I take advantage of the relaxed start to today to tidy up week 4.



Campsite - Beaver Foot Lodge

As I sit in the truck I can watch the sun first light the few clouds and then light up the mountaintops. The horses left the field at 05:55 and the ground squirrels arrived to forage for food around the campsite.

A promising start to the day.

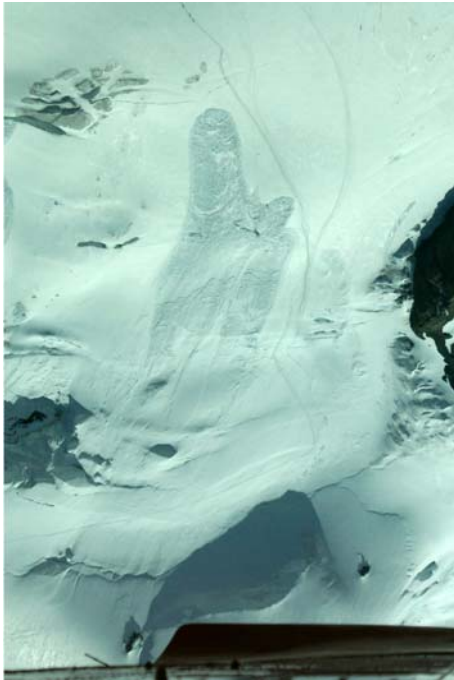
Today is a relatively quiet day in Golden, where there are a number of optional activities; hiking, flights over the Columbia Icefield and White Water Rafting. Despite Ryan's best efforts to convince someone to raft on the Kicking Horse River, there are no starters.



Columbia Icefield



Following the Blaeberry River Valley



Avalanche on Mt Athabasca



Ground Squirrel in Campground

Grace, Ryan and I opt for the flight. It is a beautiful day, the sky is blue and the air clear so we are able to get a fantastic view of the mountains, the

icefields, glaciers, lakes with ice chunks from the glaciers floating on them, avalanches, climbers on the mountains and the valleys below the snowline. We have a clear view of the Athabasca Glacier where we walked two days ago. The one and a quarter-hour flight was worth every cent it cost.

<http://www.rockiesairtours.com/>



Crevassed Glacier

Fiona and Katie opted for a hike, unfortunately the visitor information centre failed to tell us that the trailhead was 55km away and when we were half way we realised that we would not make our flight schedule unless we turned back. They finished up walking some of the trails around the town.

During the afternoon we visited a popular swimming hole near Golden and finished the day with a farewell dinner in Golden before going back to camp.



Athabasca Glacier



Snow Dome - Columbia Icefield

Rocky Mountain Explorer - Day 12

Nothing of great interest to report today, apart from a few mountain sheep by the road near Golden. Katie and I are returning to Vancouver a day before the others so that we can fly to Whitehorse tomorrow for the start of the Arctic Circle tour.

Ryan gets us tickets for the Greyhound Bus leaving Golden at 11:30 (10:30 BC time). Turns out they are the last two seats on the bus. I don't know what he would have done if there had been no seats, they were supposed to have been prepaid.

The 700km trip is uneventful, arriving pretty much on time at 21:05. Nancy is at the bus station to meet me.

I'm looking forward to softer bed, a hot shower; catch up with the emails and an opportunity to wash some clothes.



Roadside Mountain Sheep - Golden



Very long Freight Train at Golden beside the airstrip

The Air North flight arrived in Whitehorse at 14:10 and after a wait for luggage Katie and I are given a lift by the shuttle bus for a nearby hotel to the Beez Nees Hostel where Katie is supposed to be staying. I am booked into the Hyde on Jekyll Hostel in the next street.

There is some confusion over Katie's booking, both time and place, and she appears at the Hyde on Jekyll and

checks in. So far we have identified four people for the Arctic Circle Tour.

Nearby is the restored SS Klondike, the last and largest stern paddle wheeler to operate on the upper Yukon River. She ceased operation in the late 1950's as road transport had made her redundant. An attempt to use her for cruising part of the river was unsuccessful. Now maintained by Parks Canada she sits on dry land in a bend of the Yukon and can only be visited as part of a conducted tour.

The S.S. Klondike was first built in 1929 and sank in 1936. It was rebuilt and launched in the spring of 1937 as the S.S. Klondike II, the largest and last of the sternwheelers

http://www.pc.gc.ca/lhn-nhs/yt/ssklondike/index_e.asp

For almost four generations the sternwheeler was the mainstay of the Yukon transportation system. Steam powered boats were first introduced onto the lower river, below Ft. Selkirk in 1866.



SS Klondike

With the great Gold Rush of 1896-98, it was the upper river between Whitehorse and Dawson that became the major riverboat route into the interior. The completion, in 1900, of the White Pass Railway between Skagway, Alaska and Whitehorse served to confirm the primacy of the upper Yukon River route. Only the

construction of all weather roads, and the airplane would end the sternwheeler's supremacy.

A typical sternwheeler did not exceed 51.81 meters (170') in length or 10.66 meters (35') in width, and some could carry as much as 180-225 tonnes (198-248 t.) of cargo on a shallow draft of 1.21 meters (four feet). Many pushed barges to increase their cargo capacity. Altogether some 250 sternwheelers were constructed for use on the Yukon River and its tributaries between 1866 and 1936.



Passenger comforts on board

The trip down river from Whitehorse to Dawson took approx. 1.5 days and the return trip approx. 4-5 days.

Hans (from Sweden) and I decide to join a tour thinking it might only be about half an hour. Instead the tour takes over an hour as the guide explains the role and functioning of the ship on the shallow and swift flowing Yukon River. As was common to all the paddle steamers that plied the Yukon, approximately 250 of them, from 1900, she is flat bottomed and drawing only 41 inches when fully laden with 350 tons of cargo.

Katie has discovered a boutique brewery at the other end of town. We walk there to find it had closed 4 minutes prior to our arrival; so back into town for dinner and a much-needed drink.



Yukon Government Buildings - Whitehorse

Saturday 23 July 2005 - Whitehorse to Tok

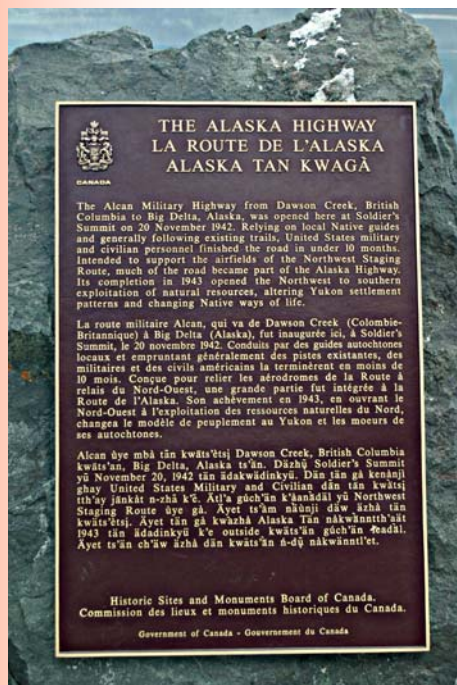
Day 32

After a reasonable nights sleep the four of us at the Hyde on Jekyll are ready at 07:45 for the start of the Midnight Sun Arctic Circle Tour. Our

guide, Brian, arrives shortly after 07:45 with four other members of the tour. Another is to join us in Glennallen, Alaska, tomorrow.

We are three from Sweden, one from Holland, one from Germany, one from the UK, two from the USA and myself.

Today we will travel to Tok, Main Street of Alaska, at the Junction of the Alaska Highway and the Tok Cutoff Road. It is a long trip and we expect to take all day.



Commemorative Plaque Soldier's Summit

First stop is a supermarket to buy food and supplies for the trip. Brian is well-organised and directs group members to seek and find the things we need. By 09:00 everything is packed in the coolers and boxes and they and our bags are on the roof ready to go.

<http://www.themilepost.com/history.html>

We head north along the Alaska Highway. The US Army in 8 months in 1942 built this highway from Dawson Creek in British Columbia to Fairbanks in Alaska, a distance of over 1500 miles. There is constant repair and reconstruction of the highway as frost heave is repaired and the road is realigned. Frost heave occurs as the result of water under the road freezing and expanding. In time the road surface breaks up, but in the meantime the road becomes very rough.



Loading supplies - Whitehorse

At first we follow the Yukon River but soon we are in the Takhini River Valley heading towards Haines Junction. Our first stop is at Takhini Burn; an area of forest severely burnt by a bushfire 60 years ago. Regrowth has been unusually slow and the area provides a grazing area for wildlife. The reasons for the slow growth are not fully understood. As in Australia, regular fires are essential to the regeneration of a forest and the provision of food for grazing animals.

<http://www.taiga.net/yourYukon/col042.html>
<http://www.taiga.net/yourYukon/col349.html>

Haines Junction is located at the junction of the Alaska Highway and the Haines Highway.

<http://www.hainesjunctionyukon.com/Home.html>



Takhini Burn



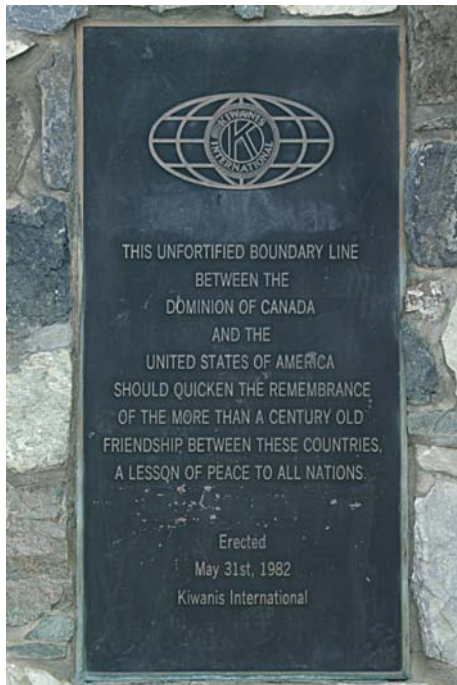
Highway reconstruction

At Haines Junction we stop for lunch and a chance to visit the Kluane National Park Visitors Centre and pick up some information before we head off along the Highway towards the Kluane National Park and the Kluane Wildlife

Sanctuary. The Kluane National Park adjoins the Wrangell - St Elias National Park in Alaska.

http://www.pc.gc.ca/pn-np/yt/kluane/index_e.asp

We stop at the Sheep Mountain Visitor Centre, hoping to see some Dall Sheep; no luck, there are none to be seen.



Border Plaque - Beaver Creek Crossing

A little further on is the Memorial to the soldiers who built the Alaska Highway and the opening of the highway at Soldiers Summit, Mile

1061 on 20th November 1942. A recording of the radio broadcast of the event can be played at the Summit.

<http://www.u-s-history.com/pages/h1729.html>



Sheep Mountain



Kluane Lake

There are spectacular views of Kluane Lake from the Soldier's Summit; snow covered mountains in the

distance and white clouds in a blue sky are reflected in the almost smooth lake surface.

Beaver Creek is near the US border and we stop briefly to make sure all documentation is in order. We pass the Canadian checkpoint without stopping and stop at the border to record our crossing before carrying on a short way to the US checkpoint. Some of us have to complete green cards for visa waivers. This is a quiet border post and we are soon on our way again towards Tok, our overnight stop.



**Trapper's bear proof food cache
Tetlin National Wildlife Refuge**

We stop briefly at the Tetlin National Wildlife Refuge, one of many maintained by the US Fish and Wildlife Service to facilitate the passage of migratory birds and animals. It

is an extensive area of river flats in the Tanana River Valley. 'Braiding' is a feature of these valleys as the rivers make multiple watercourses and change their courses across the width of the valley.

<http://www.fws.gov/refuges/profiles/index.cfm?id=75630>

Tok is said to be named after a US soldier's dog. Another version suggests it is derived from 'Tokyo Camp'.

<http://www.explorenorth.com/library/communities/alaska/bl-Tok.htm>



Wrangell - St Elias Mountains

We set up camp at the Golden Bear Campsite. It starts to rain but does not last long.

<http://www.hikercentral.com/campgrounds/100245.html>



Tanana River Valley

Sunday 24 July 2005 - Tok to McCarthy

Day 33



Slana Slough

Arctic Circle Tour - Day 02



Government Centre Glennallen

We are on the move again everything is packed and ready to leave by 08:30; destination McCarthy



Alaska Pipeline

in the Wrangell - St. Elias National Park. This will be another long driving day.



Fireweed

<http://www.nps.gov/wrst/home.htm>

We travel via the Tok Cutoff Road, the Richardson Highway, the Edgerton Highway and the McCarthy Road.

Our first stop is at viewing point for the Slana Slough; a wetland and river plain through which flows the Slana River. The forest growth on island formed by the silt brought down from the glaciers illustrates the way new land is formed in wide riverbeds and new forests develop. The background of snow-covered mountains is spectacular.

We continue our drive towards Glennallen, where Tanja is waiting for us. At Gulkana we join the Richardson Highway that goes to Valdez. Glennallen is another junction town, this time at the junction of the Richardson and Glenn Highways. The Glenn Highway heads to Anchorage.



Start of the McCarthy Road at Chitina

A section of the oil pipeline from Prudhoe Bay in the Arctic Sea to Valdez passes close to the Glenn Highway and we stop to have a look. The pipeline is heavily insulated to prevent freezing of the oil and the support structures which are set in the

permafrost cooled by using low boiling point liquids and cooling fins on the top of the piles to remove any heat that may result in the permafrost melting and the piles sinking.

<http://www.alyeska-pipe.com/default.asp>

On the Edgerton Highway we stop several times to view the Copper River Valley and the surrounding mountains.



Chitina

Our destination is Chitina. Chitina was once an important town on the Kennecott to Cordova railway that transported goods to the Kennecott copper mine and copper to the sea at

Cordova. The town is now little more than a ghost town with a few buildings remaining from its heyday between 1911 and 1938, when the mine closed.

<http://www.nps.gov/wrst/virtualtour/chitina.htm>



Kuskulana Bridge

Chitina is also the start of the road to McCarthy that follows the original railway roadbed for much of its length.



Footbridge to McCarthy



Copper River

The road starts by passing through a cutting for the railway, barely wide enough for a single lane of traffic, and then crosses the Copper River. This year the unsealed road is in fairly good condition and we are able to travel at the speed limit, 35mph, for most of the time.



Chitina Road

The road passes across the Kuskulana Bridge spanning the raging Kuskulana River 238 feet below. The bridge was constructed during the winter of 1910. A walkway under the roadway on the trusses enables one to view the river directly below one's feet through the walkway grille. We walked across.



Gilahina Bridge



Wrangell - St. Elias Mountains



Camp Ground - McCarthy

The ruins of the Gilahina bridge stand stark against the skyline. This wooden structure was originally 890 feet long and 90 feet high and was completed in the winter of 1911 in only 8 days.

http://www.mccarthy-kennicott.com/vg/McCarthy_Road.htm

<http://www.mccarthy-kennicott.com>

<http://www.alaskagold.com/copper/mccarthy/mccarthy.html>

Finally we reach the Kennicott River. McCarthy is on the other side. There is only a footbridge. Upstream is the toe of the Kennicott

Glacier. Our campsite is on this side of the river and we make our way there to set up camp and have dinner. The ground is rough, glacial till filled with small rock. Hopefully the sleeping mats will iron out the bumps.

Tomorrow I will take an early morning flight over the mountains and glaciers with Wrangell Mountain Air. The others are ice climbing and hiking.

The mining town of Kennecott is being restored and I plan to spend some time there and in the

town of McCarthy while the others are doing their thing.

The mining company was supposed to take the name of the glacier, which was named after Robert Kennicott, an early Alaskan explorer, but the company name was misspelled. The town and glacier are spelled Kennicott but the mines and company are spelled Kennecott.

Monday 25 July 2005 - McCarthy

Day 34



**One of many waterfalls -
Limestone Cliffs**

Arctic Circle Tour - Day 03

Out of bed before everyone I set off at 07:10 to walk to and cross the bridge to catch the shuttle to the airport.



Kennicott Glacier

Unfortunately when we arrive at the airport the cloud cover is too low on the mountains for flightseeing the glaciers so the flight is delayed for a couple of hours.



Kennicott River - McCarthy

The shuttle returns us to the small community of McCarthy, where after walking around the town with its old buildings and junk, I wait with the other passengers at the Wrangell Mountain Air office to find out what will happen. The purchase of many of the significant mine buildings in the town of Kennecott by the National Parks Service has lead to increasing numbers of tourists to the

area and McCarthy is reaping the benefit. Buildings are being restored and many look quite smart.



A rock glacier

At 09:30 it is raining; however the weather has cleared on the mountains and the cloud cover has lifted, so the flight is on. There are two couples and myself and I have the co-pilots seat. Photographing from this seat is a little difficult, but you are able to see what is coming up and prepare yourself.

Since I had done the flight over the icefields in British Columbia, you may wonder why I did this flight also.

<http://www.wrangellmountainair.com/>



Ma Johnson's Hotel - McCarthy



The New Golden Saloon - McCarthy

The glaciers in the Wrangell and St Elias Mountains are quite different from those emanating from the Columbia and nearby icefields in BC. They tend to be single glaciers spilling out of large icefields. Here there are many glaciers flowing down the mountains and joining together to form larger glaciers that in turn merge with

others to form a very large glacier with multiple medial moraines. The Russell Glacier is an example.

Most glaciers in the area are receding but one is surging and the movement is causing the glacier to break up and form a very rugged, fractured surface. The reason for this anomaly is not yet known.

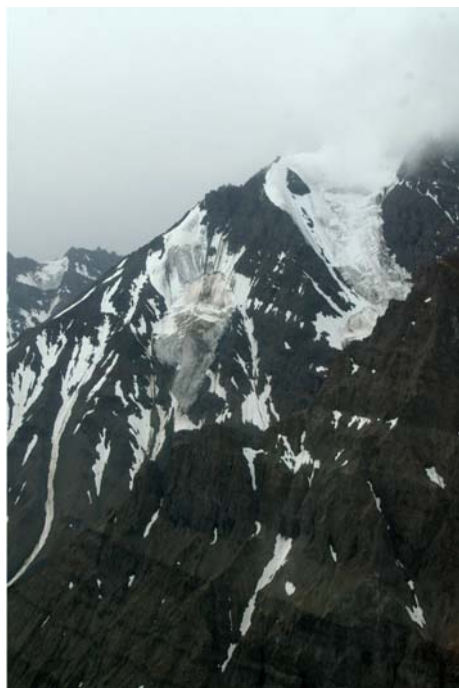


Renovator's Delight - McCarthy



Relic of the Railway

After an hour and a half we return to the airfield and McCarthy. I take the shuttle to Kennecott.



Rock glaciers are also common. Large quantities of rock mixed with ice move slowly down the mountainside in exactly the same way as the ice glaciers.

When the mining town of Kennecott was abandoned in 1938 everyone left on the last train out and everything was left behind. The remoteness of the location meant that there were few attempts to salvage machinery or to reuse the buildings. Although over 60 years have passed and there was significant deterioration of the

buildings; many remained in reasonable condition and could be restored or conserved.



Wrangell Mountain Air Flight



Russell Glacier

The Parks Service is doing this and tours through the town are being conducted by a private company; St Elias Guides. The tour seems a bit pricey at \$25, but it is the only way to see inside the mill building. The building is being conserved and inside most of the mill machinery remains so it is possible to follow the milling process from

the arrival of the ore on the aerial tramways from the mines higher in mountains to its loading on the train for the trip to Cordova on the coast.

The powerhouse generated electricity for the whole plant. This is also being conserved, but was closed to visitors today.





Kennecott Mill Building

The Kennecott Story

<http://www.nps.gov/wrst/kennecott.htm>

The historic mining town of Kennecott is an extraordinary piece of history in Wrangell-St. Elias National Park and Preserve. The impressive structures that remain at the mill site and mines represent an ambitious time of exploration and discovery in Alaska and a feat of human ingenuity and perseverance in the face of extreme environmental challenge. Kennecott's high grade copper ore, previously known and used by the region's Ahtna native population, was among the

richest deposits ever found in United States mining history. Looking up at Bonanza Ridge to the northeast of the present townsite, a visitor can note an abrupt change in rock color at approximately 6,000 feet in elevation.



Fractured Surface of Surging Glacier



Kennecott Mill Building

This contour line marks the contact between the Chitistone Limestone (light-colored sedimentary rock above) and the Nikolai Greenstone (dark-colored

metamorphosed basalt below). It is this limestone-greenstone contact that USGS geologists noted and reported around 1899 as the dominate structure along which copper ore bodies formed.



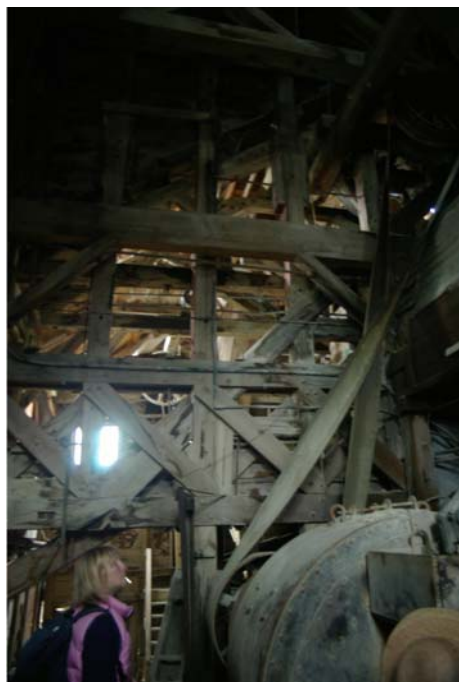
Mill Power Station



Restoration in progress

In the summer of 1900, prospectors Clarence Warner and "Tarantula Jack" Smith were exploring the east edge of the Kennicott Glacier with this valuable information. As

the pair drew closer to the limestone-greenstone contact, they could not miss the magnificent green cliffs of copper exposed on the mountainside.



Inside the Mill

Their discovery, staked as the "Bonanza Mine Outcrop", was sampled revealing up to 70% pure chalcocite copper, a good measure of silver, and a trace of gold. Stephen Birch, an ambitious young mining engineer, eventually purchased this valuable, yet challengingly remote, claim. Securing the financial backing of some of the most influential families of the time, Birch formed the Alaska Syndicate. This group, which included the Morgans and Guggenheims,

became the Kennecott Copper Corporation in 1915. Along with building the mine and mill works, this corporation controlled the entire transportation route, funding the 196-mile Copper River and Northwestern Railway from Kennecott to Cordova and organizing a steamship line that shipped the ore to the smelters in Tacoma, Washington. Note: The mining company was named after the Kennicott Glacier. However, it was misspelled as Kennecott, with an "e", resulting in spelling debates that continue today.



Three Black Bears - Mother and two Cubs

Successfully meeting countless challenges posed by the extreme Alaska setting, this system of mining and transport engineering operated from 1911, when the railroad was completed to Kennecott, to 1938, when the high grade copper veins were depleted. The total value of the copper extracted was approximately \$200 million. Capital generated from the operation went on to stimulate mining endeavours in other parts of the United States and South America. Kennecott Copper Corporation remains an important name in the international mining community today.

More than just an industrial relic town, the mill holds stories of human community, past and present. At its peak, the Kennecott operation employed about 600 people: approximately 300 people in the mill camp, where the ore was processed, and 200-300 in the mines up the mountain. Operation and maintenance of the railway required an additional 300 people. During the mining era, Kennecott became a self-contained company town, complete with a hospital, general store, schoolhouse, ball field, skating rink, tennis court, recreation hall and dairy.

Following the boom-bust pattern common to mining economies across the American west, Kennecott became a ghost town soon after the last train pulled out in November of 1938.



Kennicott Glacier - close up

It was not until the late 60's and 70's that the area was rediscovered by surface mining interests and adventuresome Alaskans attracted to the remote and scenic wilderness setting. The creation of the surrounding Wrangell-St. Elias National Park and Preserve in 1980 helped stimulate the growth in tourism that shapes the town today.



Kennicott Glacier

With a couple of hours available before I had to be back in camp I decided to walk to the toe of the Root Glacier. Said to be a short walk it still takes an hour.

On the way I finally see bears. Not one bear, but three. In the distance on the ice moraine is a black bear sow and two cubs.

Return to camp to find the walkers have returned and the ice climbers have not. We decide that they are going to be late and hungry and that we should organise dinner. They arrive at about 20:00.



Kennicott Glacier - Ice Moraine



Kennicott Glacier

After a busy and interesting day we collapse into bed.
Campsite was OK; facilities were poor.

Tuesday 26 July 2005 - McCarthy to Valdez

Day 35

Arctic Circle Tour - Day 04

An early morning start for the drive back along the 60 miles of gravel road to Chitina.

Short stops for pictures until we reach the fish wheels at Chitina. Wheels with two baskets rotate in the river and scoop out the salmon and deposit them in boxes. When the fish are running up to 200 fish are caught in 24 hours.

We stop for pictures and while we are there a group pulls up at a wheel, unload their coolers and start unloading the fish.

http://www.ecotrust.org/copperriver/crks_cd/content/pages/background/salmon_who.htm

Before western contact, Ahtna and Eyak Natives harvested Chinook, sockeye and Coho salmon using funnel traps and spears in clear-water tributaries. In the muddy main stem and at the Copper River delta, weirs, gillnets, and dip nets were used. At the turn of the 20th century western settlers introduced fish wheels, and by

1920, fish wheels and dip nets were the dominant methods for harvesting subsistence salmon.

Today, subsistence fishing is still an important part of Alaskan life. On the Copper River, participation and harvest has increased from about 4,500 permits in 1984 to over 8,000 today. In 1984 about 75,000 sockeye and 2,300 Chinook were harvested in the subsistence fisheries. In 2003, the harvest was about 130,000 sockeye and 4,500 Chinook.

Since 1990, approximately 95% of the subsistence harvest has been sockeye salmon, 4% Chinook salmon, and 1% Coho salmon. In the Alaska managed

subsistence fishery, the percentage of non-Copper River basin participants has increased from less than 20% prior to 1991 to about 60% in 1999.



A typical catch

We walk over to watch and find that the licensee is the only one on the river with a Federal License to sell 1000 fish per season. Everyone else has a state license and can take up to 500 fish for their own use. What they don't need they can give away.

We are able to buy three fish, about 3kg each, for \$5 each. I will clean and cook them tonight over the campfire.

We move on, very pleased with our purchase, to the wayside stop of Lake Kenney to refuel the truck.



View from the McCarthy Road



Fish Wheel - Copper River, Chitina

It is time for lunch, and then we are soon on our way to rejoin the Cutoff Highway and head for Valdez.



Worthington Glacier



View from Thompson Pass

At one point the Alyeska Pipeline making its way from Prudhoe Bay on the Arctic Ocean in the north to Valdez in the south is close to the Richardson Highway and we stop at the same spot Sue and I stopped at in 1996

The \$US9 billion dollar project began in 1974, when the US became nervous about continuing supplies of oil from the Middle-East and decided to take advantage of the discovery of oil in the north in 1968.



Bridal Veil Falls - Keyhole Canyon

The 800 mile pipeline was completed in 1977 and pumps some 100 million gallons a day to Valdez, where it is loaded into tankers. The revenue has enabled the state to abolish income tax and pay a subsidy to residents.

Worthington Glacier is our next stop. Since our visit in 1996 the surrounds have been

extensively developed to facilitate visitor access and there are many explanatory signs.

In 1996 our bus group were the only visitors. Today there are many cars and campers parked in the parking lot.

<http://www.alaskanha.org/worthington-glacier-state-recreation-site-valdez.htm>



Keyhole Canyon

The University of Wyoming is conducting a major research project to investigate the behaviour of glaciers.

<http://research.gg.uwyo.edu/joelh/worth/>

At the Thompson Pass, at 2,711 feet, we stop for a photo stop and a walk out to a headland for a better view of the valley.

We came down from the Pass through the Keyhole Canyon, and stop for photos at the Bridal Veil Falls. We also pass the Horsetail Falls.

Some of the group are going to for a hike and we drop them off and we head into Valdez to get supplies, set up camp and prepare dinner.

The salmon cooked in alfoil with lemon and spices over the barbeque were delicious.



Cleaning the Salmon

Arctic Circle Tour - Day 05

Today it is optional activities for everyone. Some choose the kayaking on Prince William Sound. The rest of us opt for the Stan Stevens Cruise to Prince William Sound, including the Columbia Glacier and the Meares Glacier. The cruise is an all day activity including lunch and refreshments in the late afternoon.

http://en.wikipedia.org/wiki/Alaska_Pipeline
<http://www.evostc.state.ak.us/facts/prevention.html>



Alaska Pipeline Route

We commence with a brief introduction to the Port of Valdez, the

Alyeska oil terminal, the spill protection programme that has been put in place since the Exxon Valdez grounding on Good Friday 1989, 25 years after the earthquake, and the many sea otters that inhabit the Sound. We will see many more throughout the day.

<http://www.valdezalaska.org/history/history.html>



Valdez Harbour and Cruise Boat

Valdez was born out of the gold rushes of 1897-98 when over 4000 would be miners sought an all American Route to the goldfields.

The earthquake on Good Friday 1964 destroyed the town when a massive underwater landslide created several tremendous waves.

<http://www.valdezalaska.org/history/earthquake.html>

The town was rebuilt on a more stable site.



Icebergs from the Columbia Glacier



Columbia Glacier

Weather is not the best; rain and mist, and a cold wind make it uncomfortable on the open deck.

Nevertheless when we approach the face of the Columbia Glacier through the icebergs that have broken off the glacier, the weather clears and the light improves.



Sea Otters in Valdez Harbour



Valdez Harbour

The Columbia is receding quite quickly and at the terminal moraine, 600ft below the surface of the Sound, large icebergs are grounded and may close access to the glacier itself. These have broken off the glacier where the depth of water is much greater, up to 1200ft, than at the terminal moraine.



Columbia Glacier Calving



Fish Tender

The retreat commenced in 1978 and since then the glacier has retreated nearly 8 miles. If the retreat continues it will cease to be a tidewater glacier after it recedes another 17 miles and icebergs will disappear from Columbia Bay.

<http://www.sciencedaily.com/releases/2000/12/001205071544.htm>

Today there is a safe passage and we are able to proceed up Columbia Bay to within ½nm of the

face of the glacier. Calving is occurring along the face of the 300ft high wall of ice, and we witness the fall of several very large chunks of ice into the bay.



Salmon Catch



Meares Glacier

There are plenty of opportunities for good pictures of icebergs and the glacier showing the blue colour of glacial ice.

On the brash ice harbour seals are resting.

The salmon are running and there are many small fishing boats using purse nets to harvest them are working the sound. The net is laid from the shore to about 100m offshore across the path of the migrating salmon and hangs about 20m below the surface. Then the fishing boat forms the net into a circle entrapping the fish. A small boat, thus closing the purse so that the net and fish can be hauled on board, then draws a rope along the bottom of the net closed.



Harbour Seals

A fish tender vacuums the fish from the net or the fishing boat. The fish tender moves from one fishing boat to another collecting the catch. The tender refrigerates the fish and delivers them to the fish processing plant and the fishing boats continue fishing.

Unlike many other glaciers the Meares Glacier is advancing, not retreating, thus its face is sitting on the terminal moraine and there is no barrier that may prevent access, only the floating ice.

Near the iceberg there are many harbour seals resting on the brash ice.

A large block of ice seems ready to break from the glacier. Loud cracking sounds and small falls of ice seem to indicate that calving is imminent. We wait around for about 30 minutes; nothing happens and we have to leave and start back for Valdez.

We pass to the seaward side of Glacier Island to observe the stellar sea lions on a small beach. There are large numbers of them making a lot of noise. Large males may weigh up to 500kg.

As we continue our return the captain receives a report of a humpback whale near Briar Reef, the site of the Exxon Valdez grounding, and changes course to see if we can find it. As we approach the spout is sighted and there is much excitement as everyone tries to spot the whale.



Stellar Sea Lions



Hump Backed Whale - Shot of the day

I am able to get pictures most times it surfaces, finally getting a good shot of the tail as the whale dives.

There is a second whale nearby, but its spout is weak and it is hard to find, so we press on for Valdez, which we reach at about 20:00.

Despite the weather we have had a good day. Good viewing of the glaciers, and sightings of sea otters, humpback whale, harbour seals, stellar sea lions, Dall's porpoise, black oystercatchers, pigeon guillemot, horned puffin, loons, black legged kittiwakes and bald eagles and of course many salmon jumping in the Sound.

Fortunately the sea kayakers are home before us and have dinner underway.

Arctic Circle Tour - Day 06

Three of the kayakers are going to take the Alaska Ferry to Whittier and Anchorage. We will meet them tonight.

The rest of us depart at 08:50 to retrace our path to Glennallen and then take the Glenn Highway to Anchorage. As we climb the Thompson Pass the weather closes in and the rain starts. Only pit stops between Valdez and Glennallen, however soon after leaving Glennallen a female moose and calf are spotted beside the road. Before we can get our cameras out a large RV comes over the hill and they head into the trees.

Hiking is also a possibility along this section of the road. A poll is taken and there is a unanimous decision to press on to Anchorage in the hope the weather might be better. Let's hope so. Heavy fog lies in the valleys as I write this at 12:30.

The Matanuska Glacier parallels the highway for some distance, but there are few viewing points. However at the aptly named Glacier View School there is an exceptional view. Today it is a mist shrouded view.

<http://www.matanuska glacier.com/Facts.html>
http://www.publicschoolreview.com/school_ov/school_id/1699

We arrive in Anchorage at 15:30 and after a short tour of the downtown area most of the group set out to wander around the town. Nothing much, except for a few new buildings, seems to have changed since Sue and I were here in 1996. The Inlet Inn where we stayed has had a coat of paint.



Mist shrouded Matanuska Glacier

Brian and I head off to buy supplies for the next few days. The job takes less time than we thought and we are back in town at 17:00 an hour ahead of the pickup time for the rest of the group. I wander around for a bit and as I thought at first nothing has changed; native people are still begging in the centre of town.



Glacier View School

At 18:00 the others assemble at the visitor centre and we head out to our campground. I cook pork chops with plum sauce, I would have preferred mango, but couldn't find any in the supermarket. Others help with preparation of vegetables.

After dinner we head into town to spend some time at Chilkoot Charlie's Bar. Good beer, good band; very loud. Brian and a few of us return to camp at about 23:45; the others arrive with much crashing and banging of the truck doors at some unearthly hour. No one seems to know exactly when.

<http://www.koots.com/>
<http://www.koots.com/history.htm>

Arctic Circle Tour - Day 07

Scheduled departure is 09:00 and the early to bed people are up and about in plenty of time.

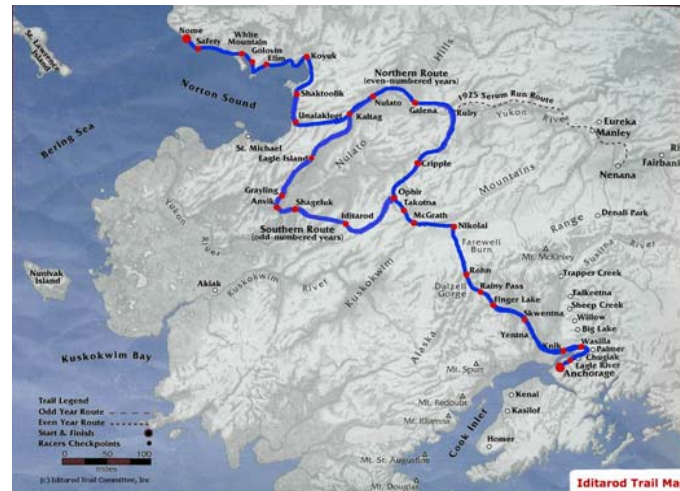
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Joe Reddington Sr - Father of the Iditarod Race

Last night a people from three rented RV's kindly gave us their surplus food as they were returning the vans today and returning home. The stock included pancake mix and 18 eggs, so I decided we should use some this

largess up by having pancakes and fried eggs.



Iditarod Trails

After the early risers had had their pancakes and eggs, the others slowly emerged and by 08:00 most had had breakfast and were ready to pack up. Nevertheless things were a bit slow and we didn't get away until 09:30.

Once on the road our first stop was Wasilla and the home of the Iditarod Trail Dog Sled Race from Anchorage to Nome. For some years the race proper has started at Wasilla. The 1850km race is named after an old supply route to the interior gold mining area and the race was inspired by a dramatic run by a dogsled team in 1925 when the route was used to get urgently needed diphtheria serum to Nome. We spend about 45 minutes looking at the dogs and the memorabilia in the visitor centre before heading off towards Denali National Park.

<http://www.iditarod.com/>
<http://www.iditarod.com/trailinfo/index.php>

<http://www.iditarod.com/geninfo/serumrun.php>



Sled Dogs - Wasilla



Byers Lake Visitors Centre

The weather is fine and overcast and low cloud and smoke from forest fires shrouds the mountains and we

are unable to see Mt McKinley from any of the vantage points along the road. A pity; we had so many magnificent views of the mountain in 1996.

The Alaska Veterans Memorial at the Byers Lake Visitors Centre is a memorial to Alaskans who have fought in the US armed services.

Alaska Veterans Memorial/POW-MIA Rest Area

http://www.themilepost.com/road_report/veterans_memorials.shtml

The Alaska Veterans Memorial/POW-MIA Rest Area is located at Milepost A 147.2 of the Parks Highway. The Alaska Veterans Memorial, adjacent the POW-MIA Rest Area, consists of an alcove and a semi-circle of five 20-foot-tall concrete panels, one for each branch of service and each with a large star on the upper part and inscriptions on the lower part.

Panels and plaques also memorialize the Alaska National Guard; the Merchant Marine; and victims of the Air Force C-47 crash on nearby Kesugi Ridge in February 1954. Three flag poles stand at the site: the center pole flying the American flag; the pole to the right the Alaska flag; and the pole to the left flying flags on special occasions.

The memorial was erected in 1983 and dedicated in 1984 by Governor Bill Sheffield, veterans, and other

civilian and military leaders. The Byers Lake site was selected because it was centrally located between Alaska's 2 largest cities, Anchorage and Fairbanks, and for the wonderful view of Mount McKinley/Denali from the memorial entrance.

A plaque on site reads: "We dedicate this quiet place to the remembrance of the veterans of Alaska who has served their country at home and throughout the world. We honor their heroism and dedication."



Stunted vegetation on permafrost area

At one stop the permafrost has stunted the tree growth and most of the plants are low growing with roots that penetrate only the thawed surface layer of the soil.

<http://sts.gsc.nrcan.gc.ca/permafrost/whatis.html>

Permafrost is defined on the basis of temperature, as soil or rock that remains below 0°C throughout the year, and forms when the ground cools sufficiently in winter to produce a frozen layer that persists throughout the following summer.

The atmospheric climate is the main factor determining the existence of permafrost. However, the spatial

distribution, thickness and temperature of permafrost is highly dependent on the temperature at the ground surface. The temperature at the ground surface, although strongly related to climate, is influenced by several other environmental factors such as vegetation type and density, snow cover, drainage, and soil type.



Alaska Veterans Memorial



Visitor Centre - Denali National Park

At Denali a new visitor centre has been built with excellent displays of the Park's history, flora and fauna. Some of the group are going to climb Mt Healy, others are going white

water rafting and the rest are going to set up camp and prepare dinner.

The walkers returned to camp to announce they had come face to face with a female moose and have close-up photos to prove it.

Tomorrow we have an early start to catch a tour bus into Denali National Park.

Saturday 30 July 2005 - Denali

Day 39

Arctic Circle Tour - Day 08

At 06:45 we have finished breakfast and are on our way to the Wilderness Access Centre in Denali National Park. This was formerly the Visitors Centre. We are booked on the 07:30 bus to Fish Creek about 60 miles along the park road. Our early arrival means we are first in line and have the pick of the bus seats. The round trip is about 8 hours and it is possible to get off the bus and walk and rejoin another bus when you are ready; provided there is a seat available.

<http://www.nps.gov/dena/>
<http://www.nps.gov/dena/home/historyandculture/index.htm>

Near the geographic center of Alaska, Denali National Park and Preserve surrounds Mount McKinley, which hinges the great arc of the Alaska Range. The mountain, called Denali—The High One—by neighboring Athabaskan Indians, soars more than 20,300 feet above the sea, highest of North American peaks. It dominates its 12,400-foot consort and the lesser elevations of the range as a monarch commands his court.

From the mountain's high buttresses and perpetual ice fields glaciers descend radially, sculpting great gorges in the granite and sediments of the massif. Then the landscape falls away through barren rock

canyons to lake-dotted tundra benches and, finally, to wide valleys formed by turbid glacial rivers, their braided beds flanked by stands of boreal forest.



East Fork of the Tolkat River

On these lowlands more than 3 miles below the banner mountain, backdropped by the far-stretching range, roams a panoply of wildlife: caribou, bear, moose, wolf, fox, and, on the lower crags, the white mountain sheep of the north. In summer the animals blend into folds of landscape, moss-floored forest, and distant tundra moors. As migratory bands, as packs and family groups, or as solitaires, they forage the slopes and stream courses, building the reserves of fat to carry them through winter.



Mountains from Polychrome Overlook

From earliest times, for at least 11 millennia, humans have been seasonally attracted to this remote and elevated country because of the concentrations of game animals. The migratory bands of caribou and sheep, the numerous moose and bear, and, in those earliest times, the relict bison and elk at the end of the last great ice age, have spurred human migration to the Denali region despite its isolation and forbidding terrain. In traditional times, a century and more ago, the people came from camps and villages on the many rivers fed by Denali's glaciers: Susitna, Chulitna, Kahiltna, Yentna flowing south; Kuskokwim flowing southwest; Kantishna, Toklat, Teklanika, Nenana flowing north. Some of the hunters cut the arc of the Alaska Range, travelling westward 200 miles

from the Copper River basin. Others congregated from the Tanana or portaged from the Yukon. These people came to hunt the high, sparsely forested slopes and valleys and the funneling narrows of the passes. They came by boat as far as shoaling streams allowed, then overland to the killing sites. After the hunt, their meat and skins in tow, they left Denali's shelterless flanks and returned to the forested lands of the big rivers where logs for building and fuel, and migrating salmon for sustaining food, allowed survival through winter darkness and cold.



There's a Grizzly in this picture

Migrations continue to this day. The animals still band together for their seasonal convocations. And people come from afar to behold this recurrent display of wildlife posed against the mountain. The great difference from the primeval scene is the migrant humans. Today, except on the fringes of the recently expanded parkland, they hunt with spotting scope and camera.

It was this gathering of wildlife, and fear that market hunting would destroy it, that inspired hunter-naturalist Charles Sheldon in the early years of this century. After extended visits to the

Denali region in the years 1906-08, he turned his concerns into a vision: a park-refuge where Denali's vulnerable concentrations of game animals could roam and propagate unhunted—a reservoir that upon overflow would populate surrounding areas to the benefit of isolated mining camps and communities dependent on wild meat. He saw the fulfilling combination of protected wildlife and magnificent mountain scenery as a lure to visitors who would benefit the economy and development of Alaska.



Tolkat River

After a decade of tireless efforts, Sheldon and the cohort of individuals and organizations that followed his lead joined with officials of the newly established National Park Service at the first National Parks Conference in January 1912, just weeks before Congress passed the Mount McKinley National Park establishment act. There he asked, in reference ". . . to descriptions of emotions evoked by the scenery of our national parks in this conference, why it . . . [is] that animals are not more mentioned as an adornment to the landscape." He cited the adornments of civilized landscapes—for example the spires and castles of Spain—then asserted:

Well, it's just exactly the same way in the wilderness. Does not, . . . like the spire in the civilized landscape, a wild animal, the product of . . . [the wilderness] environment, so adorn it that we feel that it is complete? That feeling, that completeness of all your feelings aroused by such wild scenery will in . . . [the Mount McKinley] region be gratified to the uttermost.]

Sheldon's vision of a park-refuge where visitors could view plentiful wildlife against the backdrop of stupendous mountains shaped the park's founding legislation; it inspired the policies and practices of the new park's first stewards and their successors through the years; it still determines the management philosophy and the visitor expectations of the expanded Denali National Park and Preserve created by Congress in 1980.



Temporary Visitor Centre at Tolkat River

Vehicle access to the park is limited to the first 15 miles of the park road and the numbers that can camp inside a region within the park are also restricted

The weather is foul and threatening to get worse, not better. There is little chance of seeing Mt McKinley today.

We are fortunate; our first sighting of animals, caribou, is made soon after we get under way.

The Park Road climbs above the tree line to areas of permafrost and tundra and as we climb a Grizzly bear and cub are spotted a long way off on the valley floor foraging for food on the islands of the braided river.



Gathering Storm

At Polychrome Overlook the views of the East Fork of the braided Toklat River valley and the surrounding mountains is rather spectacular and the colourful cliffs of the valley sides are quite brilliant despite the lack of sunshine. We are now above the tree line and the ground is covered with small bushes and lichens.

Another bear with cub is spotted.

We descend from the Overlook to the Toklat River and visitor centre. Sharn decides to take the longer trip to Wonder Lake and leaves us here.

We stop for about 20 minutes before heading off to Fish Creek (which isn't really; just a turnaround until the Eielson Visitor Centre is rebuilt). More

Caribou are sighted on this section. Roger, Magnus and Renaldo decide they would like to get off at Fish Creek and walk for a while. We turn around and head back to Toklat River for a longer break for lunch.



Roadside Grizzly

Weather seems to have improved a little and we are able to see the mountain sheep on the mountainside. The high powered telescopes bring them clearly into view.

Lunch over we start back, and as we do, thick black clouds form to the north and shortly there is thunder and lightening and heavy rain and hail. The weather has turned very nasty and the walkers are caught in it. The rain persists for most of the way back.

However, fortunately we spot a grizzly right beside the road and soon after a moose cow.

Not a bad day considering the weather, 5 bears, 10 caribou, a moose, numerous mountain sheep and a grouse and other unidentified birds.

Denali takes on a sombre, almost threatening aura, when the mountains are shrouded in cloud, the rain falls, the thunder crashes and the lightening flashes.

On return to the Wilderness Access Point, Katie and Hans stop off in Denali Village and Kendall, Tanya and I return to camp intending to walk along the Three Lakes Trail on the other side of the Nenana River. This we do for about 1½ hour and on our return find everyone except Sharn has returned. The walkers have seen a small pack of wolves. They have been very lucky as wolves are rarely seen.



Campsite by the Nenana River

Dinner, pasta and meat sauce is soon under way and when Brian returns with Sharn soon after 19.00, it is soon despatched and by 20:30 some are heading for bed. This trip is proving to be hard going, with long days and early morning starts, and a good deal of sleeping goes on while we are travelling.

Arctic Circle Tour - Day 09

We depart at 08:30 and continue along the George Parks Highway towards Fairbanks where we will head North on the James Dalton Highway to the Arctic Circle.

First stop is Nenana; situated at the confluence of the Nenana and Tanana Rivers, the town is an important river port and railway town.

<http://www.explorenorth.com/library/communities/aska/bl-Nenana.htm>



Taku Chief - The last wooden tug boat on the Yukon and Tanana Rivers

The native people, the Nenana Deneyee, have occupied this land for generations. In 1905 the Army Signal Corps built a telegraph station as part of a network across Alaska.

The arrival of the first railroad survey party in 1916 started a waterfront dock. Nenana was perfect location for the railroad to meet the Interior's river

system. The railroad was completed in 1923 and river barges still ply 1400miles of the Tanana and Yukon Rivers, serving communities along both rivers.

It was from Nenana that the dog sled relay carrying diphtheria vaccine to Nome started in January 1925; the event, which is commemorated by the Iditarod Trail Dog Sled Race commemorates.



Dog Food - Nenana

Since leaving Denali the terrain has changed as we descend from the mountains to the river valley.



Yukon River



Sunset at the Arctic Circle

A short stop at Fairbanks to buy supplies for the rest of the trip and fuel the truck and we are soon on our way again. We will refuel again as otherwise we will not have enough fuel to return to Fairbanks.



Modern tug boats - Nenana

As we drive north from Fairbanks we climb into the White Mountains. These mountains are not as rugged as Denali and more rounded indicating they are more highly eroded than those nearer the coast. The trees are also becoming smaller and in

higher parts they are sparser. Forest fires are burning in the area and at one point are close to the road and the Alyeska Pipeline. The road follows closely the route of the pipeline to Prudhoe Bay.

A flat tyre discovered while we are refuelling at the Yukon River crossing delays us for about an hour and a half while we change the wheel and have the tyre repaired at the nearby settlement.

Burn sites from last year are covered in fireweed, the territorial flower of the Yukon Territory. Fireweed is the first plant to flower after the fire and begins the cycle of regeneration of the forest.

The Arctic Circle is reached at 19:30 and we set up camp about 300m north of latitude 66°33'. Although the midnight sun occurs here on June 22, it is light all night.



Alaska Pipeline - Yukon River Crossing

Monday 01 August 2005 - Arctic Circle to Chena Hot Springs

Day 41

Arctic Circle Tour - Day 10

Breakfast and pack up are bit slow this morning as some have been up most of the night, enjoying a few drinks and the endless daylight with some fellow campers on their way back to Fairbanks after an unsuccessful weekend hunting caribou.

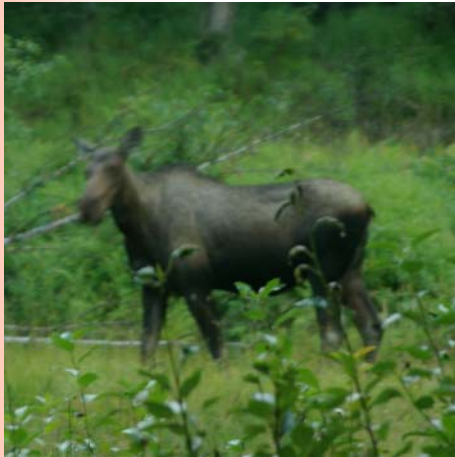
After the truck is loaded we pose for a group photo beside the Arctic Circle sign, positioned on a convenient view point.



Renaldo, Hans, Kendyll, Magnus, Tanja, Roger, Sharn, Katie, Jim, Brian



Finger Mountain



Roadside Moose



Beaver - Evening - Chena Hot Springs

A stop at the Arctic Circle gift shop for a certificate for crossing the Arctic Circle is the first activity. Certificates are \$2 or free with any purchase. A \$1.99 fridge magnet fills the bill; we have to wait a while for the certificates

to be printed as three spelling mistakes were found on them.



Hotspot Cafe

A stop at Finger Mountain for a short walk, in the rain, around this volcanic tor that stands up above the surrounding river valleys and wetlands that feed the rivers; thus ensuring their year round flow. Small signs placed along the trail explain the role of many of the tundra lichens and plants play in providing year round food for birds and animals. Winter temperatures of -30°C and hurricane force winds create a very harsh environment for all flora and fauna.

By the time we reach the Hotspot Café, where we changed the wheel last night, for refuelling the weather seems to be clearing, so perhaps at last we will see some sun and get the tents dry.

Chena Hot Springs Resort is about 60 miles east of Fairbanks. A popular spot at any time of year it is particularly popular with Japanese tourists who come in the winter to view the Aurora Borealis (Northern Lights). Besides the campsite there is a resort hotel and activities for visitors.

<http://www.chenahotsprings.com/>
<http://www.chenahotsprings.com/history.html>



Sunset - Chena Hot Springs



Evening Mist - Chena Hot Springs

The afternoon has been fine and we arrive at about 07:30 and set up camp by the creek. As a precaution we setup the tarpaulin to protect against the seemingly inevitable rain at dinnertime. Sure enough; down it comes and then clears again around 21:00.



Fleeing Moose

Amenities for campers are rather minimal. Showers and toilets are in the hot springs change rooms a couple of hundred metres away.

Nearby there is a nature trail, of about 2 miles through the forest, beside the stream and around the lake created by beavers damming the creek and building embankments to retain the water. After dinner we walk the trail and encounter a moose cow and 2 calves and in the lake there are several beavers swimming to and fro and diving for food. One is very large; the others seem to be much smaller.

We spend some time watching them and taking photos when we can in the fading light as the sun sets. Suddenly there is a great commotion as one of us disturbs a grazing moose cow that jumps into the water and swims the length of the lake.

From the other side of the lake we have a view of the sunset reflected in the pool. We soon find a suitable location for pictures.

To prevent fighting the sled dogs are chained to stout poles so that they cannot get at one another. Each dog has a small kennel.

By 21:00 we are all ready for bed.



Sled Dog - Chena Hot Springs

Tuesday 02 August 2005 - Chena Hot Springs

Day 42

Arctic Circle Tour - Day 11

calves last night. His antlers were quite small.

During the night we are wakened by the sound of fireworks: we have no idea why.

Hans and I decided last night to rise early and go back to the lake to see if we would find any beavers on the banks of the lake. We are up by 06:00 and set out on the Nature Trail and soon find a bull moose in the same meadow as we had seen the cow and



Very Old Tractor - Chena Hot Springs



Squirrel

The lake is shrouded in mist and it is difficult to see the surface, and not yet light enough for photographs, but we do spot several beaver in the water.

As the mist clears and the light improves we can see that they are

small beavers, similar to the ones we saw last night.



Diving Beaver



Monument Creek

At another spot, further around the lake, we find the large beaver swimming and diving, making a great splash each time. I get a few good photos and we return to camp for breakfast.

After cleaning up breakfast, Hans, Tanya, Kendyll and I walk around the trail bordering the creek, about 4 miles, returning to make lunch and do some washing.



Hot House for Hydroponic Vegetables



Ice Chess Board - Ice Museum - Chena Hot Springs

In addition to the resort complex there is a large amount of earth moving and drilling equipment. I thought that there was an exploration company working in the area.



Barbeque Area for Resort

During an afternoon walk we run into a group of local people; one turned out to be the owner, Bernie Karl

<http://www.anchoragepress.com/archives-2004/coverstoryvol13ed8.shtml>,

of the resort and he was drilling to determine the extent of the sources of geothermal energy in the valley with a view to becoming energy self sufficient by use geothermal sources to generate electricity and heat greenhouses to produce enough food for the resort.

<http://www.eere.energy.gov/geothermal/pdfs/36548.pdf>

<http://www.explorenorth.com/articles/billjones/ancientgeology.html>

<http://www.chenahotsprings.com/water.html>



Outdoor Pool - Chena Hot Springs

The geothermal source is helium and carbon dioxide rich. He intends to liquefy the helium and use the CO₂ to enrich the CO₂ in the atmosphere in the greenhouses and accelerate the growth of hydroponic fruit and vegetables. The greenhouses will be heated from the geothermal source. An experimental greenhouse has a crop of large tomatoes.

The reason there is so much equipment is that the owner buys second hand equipment for the project and may resell it when it is no longer needed.

A feature of the resort is an Ice Museum. There had been an Ice Hotel; but it had melted in the hot summer of 2004. Some had a few drinks there before bed.

<http://fairbanks-alaska.com/ice-hotel-museum.htm>

<http://sunhusky.com/becomingalaskan/Christmas2003/Fairbanks/Chena/IceHotel/>



Outside Ice Museum - Chena Hot Springs

Wednesday 03 August 2005 - Chena Hot Springs to Tok

Day 43

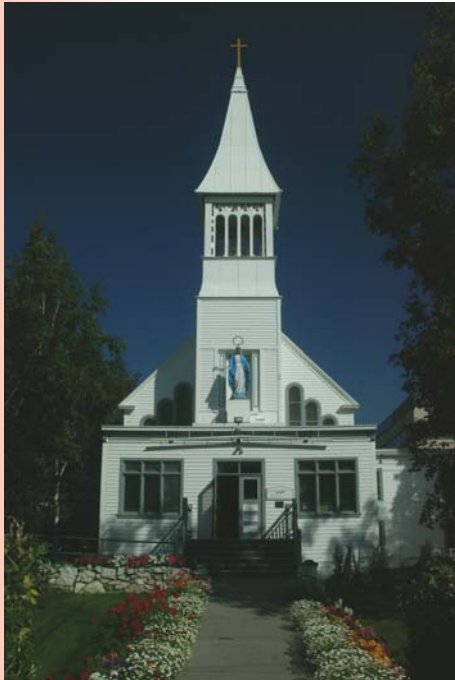
Arctic Circle Tour - Day 12

Overnight temperature was definitely below freezing; water on the truck roof

rack cover has 2mm of ice on it this morning.

Today is a driving day; we are heading back to Fairbanks and then southeast along the Richardson and Alaska

Highways towards Tok, where we will turn east towards Dawson City via the Taylor Highway and the Top of the World Highway.



Immaculate Conception Church - Fairbanks



A good Moose shot



Golden Heart Plaza - Fairbanks



Rabinowitz Courthouse

We will camp tonight before crossing the border into Canada at Lindsay.

Fairbanks is the state capital of Alaska. The town's early development resulted from the gold rushes in the first decade of the 20th century. It is the second largest city in Alaska, having been surpassed by Anchorage.

<http://www.ci.fairbanks.ak.us/>
<http://www.ci.fairbanks.ak.us/history.php>

Downtown is small and apart from the memorial to the settlers, there seems little of interest.

The memorial features Malcom Alexander's statue "Unknown First Family" which is "dedicated to all Families past, present and future, and to the indomitable spirit of the people of Alaska's Interior. The statue is surrounded by plaques recording the names of people who have been part of the State of Alaska and stands in the Golden Heart Plaza, built to commemorate the Silver Anniversary of Statehood.

<http://www.acsyellowpages.com/fairbanks/tour/>

<http://www.cbna.info/churches/fairbanksicc.html>

Fairbanks' first Catholic community at Immaculate Conception is historically juxtaposed with the frenetic gold discovery on the nearby creeks in 1902 and the arrival of indefatigable pioneer, Fr. Francis Monroe, S.J., in 1904. Almost immediately after his arrival from Eagle, he began building the first Catholic church in the Fairbanks area followed by a much needed hospital. While accomplishing his building projects and ministering to miners and their families, Fr. Monroe managed to recruit Sisters to staff the hospital.

Fr. Monroe's church was originally built on the corner of First Avenue and Dunkel Street located on the south bank of the Chena River. After a few years, he decided that it was best to have the church situated closer to newly opened Saint Joseph hospital. In the winter of 1911, when freeze-up had arrived and the river ice was thick enough, Fr. Monroe hired a team of horses and men to move the church building. The crew, using skids, slid the church building across the ice to its new location on north bank of the Chena River where Immaculate Conception Church now stands.

In 1951, three years after Francis Gleeson, S.J., became Bishop, Alaska was divided into separate church administrative entities. In 1962, the Mission areas of the North was raised to the status of Diocese. Immaculate Conception Church became the Cathedral of the North and remained so until 1966 when Sacred Heart Cathedral was built to accommodate a growing congregation.



Very Large Grizzly - Museum of the North

One of the few (perhaps only) modern building downtown is the Rabinowitz Courthouse of the Alaska Court System.



Mammoth Fossils - Museum of the North



University of Alaska, Fairbanks

On the other hand the University of Alaska, Fairbanks that is located on the hillsides overlooking the Chena River Valley, is housed in new modern buildings and has an excellent small Museum of the North. The exhibits include displays featuring the lives of various community groups from different parts of the state. Displays of Alaskan fauna, both current and past, are displayed in rather old-fashioned display cases.

<http://www.uaf.edu/museum/index.html>



Museum Building

A half hour stop at the 'North Pole' for Santa's Shop helps to while away the afternoon. The town was called Moose Creek.



Tanana River

Shortly after a brief stop by the Richardson Highway for a view of the braided Tanana River we come upon a group of cars stopped by the highway. A moose cow and a well-grown calf are feeding in a roadside pond so we stop for some

more moose pictures. We have a good clear view and no excuses for a bad picture.

We make camp at the Tok River State recreation site by the river. An early start is planned for the

morning as forest fires along the Top of the World Highway may delay us on the way to Dawson.

Thursday 04 August 2005 - Tok to Dawson City YT

Day 44

Arctic Circle Tour - Day 13

Everyone is up by 06:00 and we are on our way at 07:30. Fires started by lightning are common in the summer and as we drive along the Taylor Highway we pass through large areas burnt last summer. Nevertheless there are many unburnt areas that would have provided a haven for wildlife.

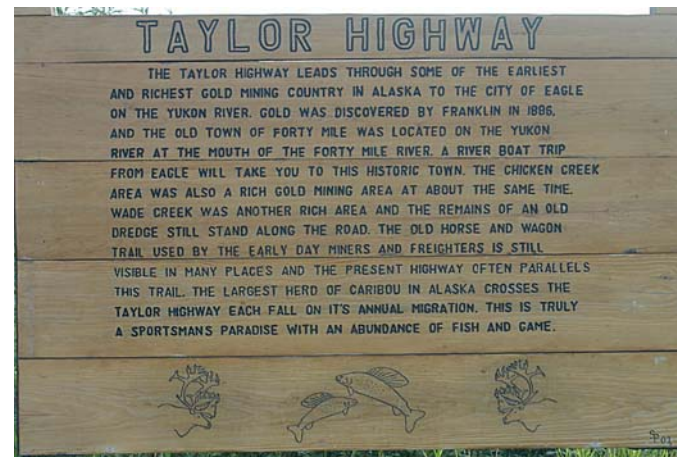
At the Mt Fairplay wayside stop the largest caribou herd in Alaska, the Fortymile herd, migrate to the northwest each spring in search of fresh pastures.

http://www.polarcom.gc.ca/english/pdf/meri_03_spring_en.pdf
<http://www.adfg.state.ak.us/news/1997/3-17-97.php>

In Comeback, Caribou Cross Yukon River Into Canada

By THE ASSOCIATED PRESS
<http://www.northernterritories.com/News%20Special%20Page.htm>

FAIRBANKS, Alaska, Nov. 2, 2004 — Thousands of caribou from a once-decimated herd forded the Yukon River for the first time in decades last week.



Taylor Highway Sign - Mount Fairplay Wayside

The caribou are known as the Fortymile herd, named for the river that defines their territory. Biologists who study the herd believe it is the first time it has crossed the Yukon River since the early 1960's, said Craig Gardner, a wildlife biologist with the state Department of Fish and Game.

"If you read the papers from Dawson City in the early 1900's, this is how it used to be," Mr. Gardner said.

The caribou crossed the river into Canada near the mouth of the Fortymile River where it flows into the Yukon. Some trappers who live in the area reported seeing caribou swimming the river, said Dorothy Cooley, a wildlife biologist with the Yukon Department of Renewable Resources.

The Fortymile herd, which dwindled to only 6,500 in the early 1970's from more than a half-million in the 1920's, has doubled since biologists began a recovery plan in 1995. The herd has now grown to about 46,000, prodding it to expand its range.

"You can't keep growing a caribou herd and have it staying in the same range," Mr. Gardner said.

Caribou were discovered on the north side of the Yukon on Tuesday during a telemetry tracking flight by a pilot, Paul Zaczkowski, who picked up signals from five radio-collared caribou that had crossed the river. Based on the five radio signals, Mr. Gardner estimates that 2,000 or 3,000 caribou have crossed the Yukon River, and, judging from reports by Yukoners, more are on the way.

The Fortymile herd's move into Canada was cause for celebration in the Yukon, where the Fortymile herd has not been seen for decades.

The Fortymile herd numbered an estimated 568,000 in 1920. The renowned biologist Olaus Murie once spent 20 days watching the herd cross the Steese Highway in Alaska.



USA - Canada border - Top of the World Highway

But the herd declined in the next decade, probably because of loss of winter habitat to fires, food limitations and hunting.

The herd rarely crossed into the Yukon after 1973. It grew to about 22,000 by 1990 but bad winters and wolves kept the herd in check until biologists in the Yukon and Alaska began working to rebuild it in 1995.

The state sterilized the breeding pairs in more than a dozen wolf packs that hunted on the herd's calving grounds each spring and moved more than 100 wolves from the Fortymile region to other parts of the state. Private

trappers took more than 200 wolves from the herd's range, and hunting restrictions were put in place to allow the harvest of only 150 bulls a year for five years.

The herd responded by growing at more than 10 percent a year.



Downtown Chicken



'Pedro' Dredge - Chicken



Mountain View - USA - Canada Border



'Jack Wade' Dredge

The town of Chicken on the banks of the Chicken Creek was once a gold mining centre, but now it is a tourist stop with a few shops and a bar catering to the passing tourist.

Gold was extracted from Chicken Creek using dredges. The old dredge 'Pedro' that operated from 1958 to 1967 is being restored as a tourist attraction. I will not rush back next year to see it; progress looks slow.

<http://www.explorenorth.com/library/communities/alaska/bl-chickenmain.htm>



Welcome to Dawson City

The 'Jack Wade' gold dredge is a relic of the gold rush days and lies by the river where it was abandoned. Designated a historic site; it is steadily rotting and rusting away and is unsafe to enter.

http://www.questconnect.org/ak_gold_dredges.htm
<http://www.explorenorth.com/library/weekly/aa072999.htm>

We re-enter Canada at the Poker Creek, Alaska; Little Gold Creek, Canada, border crossing.



Robert Service School - Dawson City



Second Ave - Dawson City

The views from the checkpoint are spectacular despite the smoke haze and cloud. The Top of the World Highway follows the ridges of the mountains, occasionally descending into river valleys so there are always views into the distance.



Yukon River - Dawson City



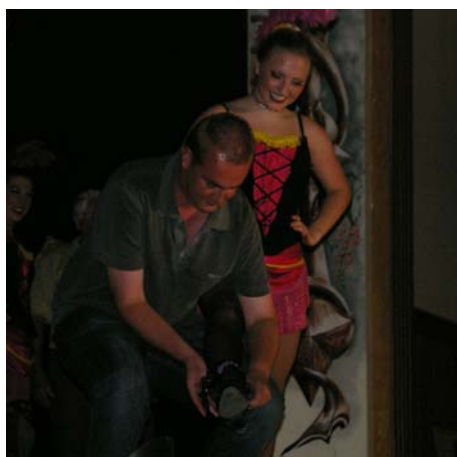
Result of melting permafrost

We continue along the highway to the welcome sign for Dawson City; a building front in the style of the gold rush buildings and stop for a picture, then descend from the ridge to the Yukon River ferry crossing. The ferry operates 24 hours a day.



**St. Mary's Catholic Church -
Dawson City**

Our overnight stop is at the Dawson City River Hostel where there are no showers so we cross the river to the city and a shower at another campground.



Renaldo gets the Garter



Diamond Tooth Gertie's



Old Post Office - Dawson City

Dawson City was established at the confluence of the Klondike and Yukon Rivers after gold was discovered in 1896. In its heyday 100,000 people lived in the area. These days there are about 2000 inhabitants providing tourist amenities and support to the remaining mining activities. Parks Canada has purchased about 30 historic properties in the city and restored or conserved them.

<http://www.yukonalaska.com/communities/dawsonhist.html>

After showering we had about 2 hours to look around the camp before checking into the hostel.

There is much to see in Dawson City and a museum tracing the local history; more time is needed to properly see the city.

Two famous authors spent some time in Dawson City, Robert Service, an Irish poet and Jack London; both famous for their tales of the gold rush and exploration of the Yukon and Klondike regions.

<http://www.artdamage.com/service.htm>

<http://www.robertwservice.com/>

<http://www.getyourwordsworth.com/WORDSWORTH-JackLondon.html>



Sunset on the Yukon River

After settling ourselves into the Dawson City River Hostel we walked back into town; saving a possible 30minute wait for the ferry to get the truck across if it busy, to sample some of the 'must do' things in town.

<http://www.yukonhostels.com/>

First, our final dinner together at Klondike Kate's Café and then the Downtown Hotel for Sour Toe Cocktails (for some, check it out on the internet if your interested), and finally Diamond Tooth Gertie's for the show and casino.

http://www.yukonhostels.com/new_sourtoe.html

http://www.dawsoncity.org/attr_dtg.php

The building known as Diamond Tooth Gerties was built in 1910 by the Arctic Brotherhood, as the centre of Dawson's most important social gatherings.

When the Klondike Visitors Association took over the building in 1971, it was transformed into the popular casino named after a famous dance-hall queen, Gertie Lovejoy, who received her nickname (Diamond Tooth Gerties) from having a diamond

inserted between her two front teeth. Revenue from Gerties is re-invested in the community to preserve history, produce local events and tourist attractions, and to promote the Klondike area.

Some of us return to the hostel straight after the show. Others stay on to gamble and drink and drift into the hostel during the night.

Friday 05 August 2005 - Dawson City YT to Whitehorse

Day 45

Arctic Circle Tour - Day 14

Last day of the tour; time to clean out the perishable food and pack up. This does not take long and we are on the road waiting to cross on the ferry soon after 09:00.

First stop is at a viewpoint overlooking the Tintina Trench that is a linear valley that extends into Alaska and southeast across the Yukon. Beneath the Tiniana Trench is a fault line along which the bedrock has shifted a minimum of 450km laterally. Some 65 million years ago, the rocks presently beneath Dawson City were adjacent to those of Ross River. About 8 million years ago, the earth's crust separated along the fault, creating a wide valley or trench

The trench had a dramatic impact on the river drainage system. The formation of the trench created a channel for rivers draining the interior

to the south. Later, blockages due to ice build up the first glacial period around 3 million years ago, caused the Yukon River system to be rerouted. Water which once drained in a southerly direction was forced northwest, into Alaska.



Tintana Trench

The mighty Yukon River itself, which now flows into the Bering Sea, once flowed south to the Gulf of Alaska. Evidence of the ancient river can be seen as old terraces

along the redirected river north and south of Dawson. These remnant shores contain gravel types from the Ogilvie Mountains 40km to the north, which could only have been deposited if the river once flowed south.

<http://www.taiga.net/yourYukon/col128.html>



Five Fingers Rapids - Yukon River

http://www.geology.gov.yk.ca/publications/summaries/fra_mework.html



Over 200 steps up from the Rapids

Geological process continues to shape the Tintina Trench to this day. The most significant activity is

“landsliding”, generally caused by erosive action. Presently, landslides occupy 35% of the surficial deposits within the Tintina Trench north of Dawson – one of the highest of such concentrations.

Mineral deposits, including gold, are a by-product of the plate tectonic forces that shape the continents. When the two tectonic plates come together, one is often pushed beneath the other where it melts deep within the earth. Some of the melted rock floats to the surface as lava, while more of it cools within the crust to form granites.

Five Fingers Rapids are the most treacherous rapids on the Yukon River between Dawson City and Whitehorse. The rapids are formed by four erosion resistant basalt pillars across the river resulting in five fast flowing channels. Grooves and lines along the rock walls of the river are clear signs of recent glaciation.

<http://www.yesnet.yk.ca/schools/carcross/sternwheelers/s ternwheelers.htm>

The eastern channel next to the bank was the safest and over the years has been enlarged by blasting. Paddle steamers travelling upstream could not traverse the rapids without the assistance of a winch mounted on the banks or, more recently, a windlass on the bow of the boat.

The Yukon Valley is a major wildlife migrations corridor. The slopes and hills beyond extend to the Alaska border and beyond, are vital nesting and feeding habitat for many Yukon species

Next stop Whitehorse and the end of the Arctic Circle Tour.



Five Fingers Rapids – Yukon River

Saturday 06 August 2005 - Whitehorse to Victoria, Vancouver Island

Day 46

08:15 flight from Whitehorse to Vancouver and the bus to Victoria sees me in Victoria at about 15:30 where Ken & Elaine Brown are waiting for me.

The ferry crossing from Tsawwassen to Swartz Bay was smooth and in brilliant sunshine; the first for some time.

Ken Brown was at the Victoria bus station to meet me when I arrived at about 15:30.

Ken and Elaine have moved to a town house high on a bluff overlooking the Juan de Fuca Strait towards mainland USA. Snow capped Mt Baker, in Washington State, can be seen in the distance. It

is five minutes from the yacht club on Cadboro Bay.

Ships heading to and from Vancouver and Seattle pass through the straight and there is always something to see.

A quiet afternoon and barbeque dinner finished off a travel day that started rather early.

Sunday 07 August 2005 - Victoria, Vancouver Island

Day 47

A rather slow start this morning after a good nights sleep in a comfortable bed.

It is a beautiful, warm sunny day and we decide an outing on Ken's boat and a barbeque on board would be a nice way to spend the afternoon.

The yacht is a DB1, three quarter tonner, set up for cruising. Very comfortable and nice to sail in the 10 to 12 knot breeze. Unfortunately there is a strong current setting to the east and we make very slow progress to the west against the wind. Our intentions were to round Trial Island and head out of the current and proceed further along the coast.

After a couple of hours sailing we gave up and headed back to Cadboro Bay and a quiet anchorage to cook dinner and relax.

With a following wind and current we were soon back and at anchor.

Monday 08 August 2005 - Victoria, Vancouver Island

Day 48

It is another brilliant day; after so much wet weather it is nice to see 2 fine days in a row.

I have a little shopping to do today and Elaine is kind enough to lend me her car and so the morning and early

afternoon is spent checking shopping malls and downtown Victoria for what I want. I am successful.

Ken has booked for dinner with friends at the golf club. The Uplands GC is close by and at 18:00 we are sitting in the afternoon sun overlooking the 12th fairway with Gip

and Alan Hoey enjoying a bottle of Seaview Champagne to celebrate my birthday.

Catering at the club is good and we all have an enjoyable meal and great evening.

Tuesday 09 August 2005 - Victoria, Vancouver Island

Day 49

Another brilliant day! This is too much.

Victoria is the capital of British Columbia and so the parliament is located here. The building stands on the shores of Victoria harbour.

Victoria was originally established in 1843 by James Douglas as a fort for the Hudson's Bay Company. Bastion Square marks the site where a portion of the fort once stood, although all

that remains now are two iron rings set into the rocks at the foot of Fort Street, next to the old Customs House.

Alongside is the Royal British Columbia Museum. It is not a large museum, nevertheless there are several very interesting thematic displays showing life and history of British Columbia from the days of the explorers Cook and Vancouver and settlement by the Hudson's Bay Company.

<http://www.royalbcmuseum.bc.ca/>

The First Peoples exhibition shows the life and art of the various native peoples of the coast and inland regions. The plentiful food supplies available to the coast dwellers resulted in more settled communities while the inland people had to hunt for food and were nomadic. The inland people lived in the region between the Coast Mountains and the Rocky Mountains. Their lifestyle also differed from the plains natives to the east of the Rockies. The inland people built large pit houses for winter accommodation when snow covered the land.

The tour of the First People's Gallery was excellent.



Humming Bird - Ken and Elaine's Balcony

The exhibition of flora and fauna of the mountains and the seashore is very good and includes exhibits of the impact of global warming and cooling on the BC environment.



Province and Territory Coats of Arms



Knowledge Totem - Victoria



Provincial Legislature - Victoria

Life in BC, particularly during its early settlement by Europeans is very well portrayed by reconstructed buildings from the period and examples of the main industries of fishing, logging and mining. These industries are still important.



Empress Hotel and Inner Harbour



Captain James Cook

A temporary display of historical material and artefacts from Tibet; *Tibet: Mountains and Valleys, Castles and Tents* explores two ancient ways of life in Tibetan society prior to 1959 — the nobility and the nomads — as well as the influence of the region's extreme altitudes and barren landscapes on its economic, religious, and artistic culture. Artefacts include the lavishly decorated ornaments of the wealthy and the tools of farmers and herders.

The Newark Museum's collection of Tibetan art has its origins in a remarkable group of items brought from the Sino-Tibetan borderland in

1911 by Dr. Albert L. Shelton, a medical missionary, with additional objects collected between 1914 and 1920. The Museum also acquired three other missionary collections from north eastern Tibet, significantly enriching its holdings in ethnographic and ceremonial art. Paintings, sculpture, ritual objects, dance masks, tents, saddles, headdress and weapons are among the featured objects.



The 'Tilikum'



Fort Street and Maritime Museum



Inner Harbour - Float planes to downtown Vancouver



Thunderbird Park

Having spent over three hours in the BC Museum, I headed to the Maritime Museum located in the old Vancouver Courthouse. The displays of British Columbia's maritime history, both commercial and naval, since settlement is very interesting.

<http://mmbc.bc.ca/>

On display is the dugout canoe 'Tilikum'

In 1901 Captain Voss left Oak Bay, Victoria, in the modified cedar dugout canoe the Tilikum on a journey in which he intended to circumnavigate the world. The voyage was to last 3 years and 3 months from Victoria to Margate, England.

Journalist Norman Luxton accompanied Voss for part of the voyage. It was hoped that Luxton's writings would help finance the expedition. Dropping Luxton off in Fiji, Voss then took on a series of temporary first mates, one of whom was swept overboard in a storm, carrying with him the

boat's only compass. In 1904 Voss and his final first-mate arrived at Margate.

The vessel was exhibited at Earls Court, London in 1905 after which it was sold and passed through a number of hands and was discovered in 1929 lying derelict.



Promenade - Inner Harbour - Victoria

Through the efforts of concerned Victorians, Tilikum was crated and returned to Victoria by freighter where restoration was carried out by the Thermopylae Club

Thunderbird Park features many Totem poles from the region and displays of native crafts and culture. By the time I got there most activities were over for the day.

<http://www.royalbcmuseum.bc.ca/programs/kidspage/pdf/thunderbirdpark3.pdf>

The Empress Hotel was part of a chain of luxury hotels built by the Canadian Pacific Railway to attract tourists to the trans continental railway.

<http://web.uvic.ca/~hist66/walktour/tour/empress.html>
<http://web.uvic.ca/~hist66/walktour/tour/leg.html>

Francis Rattenbury designed both buildings.

Wednesday 10 August 2005 - Victoria, Vancouver Island

Day 50

Another bright sunny morning!

Today I am going to take a drive along the south west coast of Vancouver Island towards Nanaimo, the other main ferry terminal for ferries from Vancouver. The last (or first) section of the Trans Canada Highway that crosses Canada from one side to the other is between Nanaimo and Victoria.

My trip takes me along the highway and over Malahat Drive that climbs to

high vantage points overlooking the Saanich Peninsular and the islands of the Saanich Inlet.

<http://www.vancouverisland.com/regions/towns/?townID=120>

Rather than speed up the highway I cut off onto the winding roads through the villages on the bays along the coast.

Mill Bay is at the north end of the Malahat Drive.

<http://www.britishcolumbia.com/regions/towns/?townID=40>

It is a village with quiet waterfront streets and wonderful Gulf Island views. A ferry connects Mill Bay with the main terminal at Swartz Bay, thus avoiding the 60km drive around the Saanich Inlet.

Mill Bay was established in the 1860s, twenty years after Victoria was founded. Its principal industry was lumber and milling, which was done at the mill on the bay.

Further along is Cowichan Bay.

<http://www.britishcolumbia.com/regions/towns/?townID=33>



**Workshop - Cowichan Bay
Maritime Centre**



Saanach Inlet

The settlement of Cowichan Bay started in the 1850s as a Hudson's Bay Company fort. The original site was located at the flats at the top of Cowichan Bay. Cowichan Bay was the earliest development north of Victoria, with Europeans settling on the secluded Cowichan Bay to farm and trap, and eventually moving into fishing and logging. In 1862 the HMS Hecate arrived with a boatload of settlers. A store and hotel soon followed, and by 1900 Cowichan Bay was a tourist mecca with steamboats calling regularly at the government dock.

Cowichan Bay draws its name from an Island Halkomelem word meaning *warm country* or *land warmed by the sun*. The name originated because of a large rock formation on the side of Mount Tzuhalem that supposedly resembled a frog basking in the sun. Originally both Cowichan Lake and the settlement were known as Kaatza, the Cowichan word for *big lake*. The Cowichan Bay area and much of the southern Strait of Georgia is the traditional land of the Cowichan First Nation.



Ken's Yacht - 'Partial Eclipse'

Today, the village of Cowichan Bay and the surrounding area is home to a host of artists, craftspeople, and cottage industries - including some fine local wineries.



Main Street - Chowichan



Cowichan Bay Maritime Centre Wharf

The Wooden Boat Society displays hands-on exhibits at the Cowichan Bay Maritime Centre.

<http://www.classicboats.org/>



**Collection of Old Outboard Motors
- Cowichan Bay Maritime Centre**



**The Guardian Pole - Quw'utsun'
Centre**

A pier has been set up as museum featuring native and settler wooden boats and early outboard motors and inboard motors. The display of model sailing ships is fascinating.



Floating Homes - Chowichan

In the workshop and beside the pier, wooden boats are being repaired and built. Members of the centre can build or repair their own boats.

There are many piers with small boats and houseboats of all descriptions.

Lumber is an important industry and across the bay is a very large stockpile of sawn timber awaiting shipment.

Next is Maple Bay. The approach to Maple Bay passes Qualicum Lake beside which there are many fine houses as there are also in Maple Bay.

<http://www.vancouverisland.com/regions/towns/?townID=39>

A pretty seaside community located in a narrow inlet and surrounded by smooth, pebbled beaches, Maple Bay is

one of the finest natural harbours on the West Coast, and bustles with marine activity all year round.



The 'Endeavour' - Cowichan Bay Maritime Centre

The sheltered haven of Maple Bay is situated halfway up Sansum Narrows, and separates Vancouver Island from Salt Spring Island, the largest and nearest of the southern Gulf Islands.

Today there is a fresh breeze and out on the bay are many small sailing boats.

Further north is Crofton situated on the calm waters of Osborne Bay in the Cowichan Valley.

<http://www.croftonbc.com/>

The original townsite of Osborne Bay was homesteaded by a handful of families in the mid-1800s. The pioneers farmed land and timber claims granted by the government of the day. Then, just before the turn of the century, a chain of events reshaped the town forever.

Australian-born Henry Croft, a lumber and mining magnate, had developed the prosperous Lenora mine at nearby Mount Sicker. By 1902, his mine was producing

more ore than railway cars could load and haul away to the Ladysmith and Nanaimo ports. Inspired by significant profits, Croft bought the townsite to build a copper smelter and house his workers.

The town prospered until world copper prices plummeted, causing the closure of the mine in 1908. The miners struggled to find work in the logging and fishing industries until 1956, when a large pulp and paper mill was built on the outskirts of town, attracted by Crofton's deep-sea port.



Tzonokwa - Wild Woman of the Woods - Quw'utsun' Centre

The Owl on top is the protector of the night. He is the symbol of wisdom and warns the people danger or death is near. The Sun in the middle is the guardian in the daytime. Sun is a symbol of healing. The Bear on the bottom is the guardian and protector of the river and all the lands. He is a symbol of power and strength. My most northerly destination is Chemainus, about 85km from Victoria.

<http://www.chemainus.com/about/>
<http://www.northcowichan.bc.ca/murals.htm>

"The Little Town That Did" earned its nickname after Chemainus residents decided to expand their forest industry past into a vibrant tourism-driven future.



Murals - Chemainus

Through the dreams, imagination and energy of the community, the little town of Chemainus found a new life by putting on a new face. The town transformed itself - capturing and expressing its history, its people and its future.

Artists from around the globe were invited to paint huge heritage murals on the sides of buildings, transforming a

small coastal mill town into the world's largest outdoor art gallery

In 1982, the first five murals were created - today there are 36 murals and 12 sculptures, attracting over 400,000 annual visitors to Chemainus.



Murals - Chemainus

Although very much a tourist town now, there is still a sizable timber mill in the town.

It is time to head back towards Victoria as we are sailing in the Wednesday evening race.

My last stop is at the Quw'utsun' Cultural & Conference Centre at Duncan.

<http://www.quwutsun.ca/>
<http://www.britishcolumbia.com/attractions/?id=59>

The Conference Centre is owned and operated by the Cowichan Tribe, the largest Aboriginal band in British Columbia.

The centre is committed to the culture of warmth and sharing, aspiring to bridge the gaps that exist between

cultures and to promote native culture in a positive way. A 20-minute film depicting the life of the Cowichan and the role of Potlatch in their society and a culture of sharing is very interesting.

The Centre offers a First Nations experience, including interpretive tours, traditional artwork, salmon barbeques, displays and live demonstrations of garment making

and woodcarving, and the Khowutzun Tzinquaw Dancers.

After spending too long looking at the excellent traditional artwork on sale I joined the afternoon traffic into Victoria.

<http://www.coghlart.com/tsonokwa.htm>

Tsonokwa, Dzonokwa, the Giantess, The Wild Women Of The Woods, Wealth Giver, she is called many names by the Kwaquilt people of British Columbia. Her story is one

of the most interesting among the stories of the Northwest Coast.

The evening race proved a lot of fun; we had little idea what the course was and neither it seemed did the other boats. A fresh breeze and the strong tidal currents made for interesting racing. Local knowledge is very important. We finished second and won on handicap. Dinner at the Smugglers Cove; prawns and chips finished off the day.

Thursday 11 August 2005 - Victoria, Vancouver Island

Day 51

Overcast this morning, but still fine. I have no major plans for today except to meet with people

from Midnight Sun Adventure Travel this afternoon and organise myself for the trip home.

A productive session with Scott, I think.

Friday 12 – Sunday 14 August 2005 - Victoria to Melbourne

Days 52 -54

A long trip home.

First the bus at 11.30 from Victoria to catch the plane at 17:30 to Los Angeles and then the 15hour flight from LA to Melbourne overnight.

Karen is waiting to greet me on Sunday morning.

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Bernie Karl: Owner of Chena Hot Springs Resort

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A midwinter's dream

Bernie Karl has made and lost millions on risky ventures. Can his latest idea stand the heat?

By Kyle Hopkins

Photos by Matt Hage

Last December, Bernie Karl showed a small crowd around his nearly completed Aurora Ice Hotel at Chena Hot Springs Resort. It was about 20 degrees inside the crystal blue building, warmer than outside but still freezing for anybody in tennis shoes. Karl, who wore insulated work clothes and a cap with thick flaps covering his ears, resembled a dog-mushing George Lucas. Workers were busy measuring for frozen chandeliers while others hauled ice to a corner, where the first of six bedrooms took shape through the hands of champion ice carver Steve Brice. Karl, 51, a bombastic Fairbanks businessman, beamed through his well-trimmed beard. He told guests his Aurora Ice Hotel was on its way to becoming one of Alaska's biggest tourist attractions. They took turns toasting his new hotel with shots of rum at a bar shrouded in ice.



Several days later, an IRS employee, one of the hotel's first overnight guests, curled up with a Star Trek novel before falling asleep on a chilly bed covered in caribou hide. By last week, roughly 50 other guests had paid about \$440 each to stay overnight.



But even as the Aurora Ice Hotel has started taking guests, uncertainty looms. Karl has built the hotel in the heart of Alaska, where summer temperatures can surpass 80 degrees. He has started to cover part of the hotel with a 130-foot parachute, hoping that will shade it from the longer days. He also plans to enshrine the ice hotel in five-inch Styrofoam insulation before summer arrives.

But there are no guarantees his palace will be around next winter. In other words, it's a classic Bernie Karl project - random, risky and destined to either reap big rewards or simply melt away. The Aurora Ice Hotel is among a number of big gambles the Alaska entrepreneur has taken during the past two decades.

"I've had to redefine failure," Karl said. "Failure is if you don't try - and failure is the day you quit. The rest of it is inconvenience."

One inconvenience was losing a couple hundred thousand dollars around 2001. Karl and his wife, Connie Parks-Karl, had pledged money to help ensure that the German airline, Condor, made regular stops in Fairbanks to boost tourism. Too few people took the polar trip from Frankfurt to Fairbanks, and the Karls lost on their investment.

In the late 1980s, Bernie and a Fairbanks partner planned to spin garbage into cash. They recycled shredded paper into trailer loads of pellets, hoping to sell the pellets to the University of Alaska to burn as fuel. But the recycling equipment didn't work as planned. Karl said he lost more than \$2 million.

Still, for every loss, there have been successes and shrewd acquisitions. He and his wife profited from scooping up workcamps no longer needed on the North Slope. The Karls transplanted one camp to the coal mining town of Healy, where it's now a hotel.

The couple also seemingly made out when they bought Chena Hot Springs Resort six years ago. The state had owned the resort and poured millions of dollars into improving it. The Karls took it over and

made it a popular winter retreat, especially among Japanese tourists. Bernie Karl even found a way to use the natural hot springs to heat his buildings with geothermal energy.

Now, Karl has added an ice hotel at Chena Hot Springs. The far-flung resort is at the end of a road, about 50 miles northeast of Fairbanks. In changing rooms, visitors quickly swap cold-weather gear for bathing suits. They loudly scamper down an icy path to the steaming outdoor springs, which feed into a large man-made pool surrounded by big boulders. At night, as you drift chest-deep across the lagoon, steam obscures other visitors until they're within a few feet. It's quiet and otherworldly. Swimmers sometimes get the feeling people might be having sex right around the next rock outcropping.

The new Aurora Ice Hotel is a short walk from the hot springs. It looks like a snow-covered Quonset hut when driving into the resort, but has an ethereal, jaw-dropping beauty up close. You better get a good look. The ice hotel is destined to melt this summer unless Karl can shield it from the sun.

What drives a man to gamble with mother nature?

Old issues of the Saturday Evening Post feature a young Bernie Karl's feet in Caterpillar advertisements. His father, James Karl, shot the photographs. The elder Karl spent his career working for Caterpillar, the heavy equipment company based in Peoria, Illinois, traveling the world snapping pictures of bulldozers, tractors and other machines.

Bernie is the sixth of Shirley and James Karl's 16 children - five girls and 11 boys. Shirley, 77, is a clever, funny woman who has received a plant from Bernie every month for the past 25 years. James died three years ago, buried in a coffin built by his sons. James learned to weld years ago so he could make electric wheelchairs for his boys who suffer from a form of muscular dystrophy called spinal muscular atrophy. Bernie doesn't have the disease, but five of his brothers are confined to wheelchairs, some lacking the strength to comb their hair. Still, they've managed to run a variety of businesses.

"What God's taken away from them physically, they have ten times mentally. They're unbelievably sharp people," Bernie said.

Tom Karl, for example, owns Karl Brothers Inc., a small fuel and general contracting company with offices in Alaska and Illinois. He regularly mows the grass on his mother's property in a wheelchair resting on a trailer pulled by a garden tractor. He steers the homebuilt contraption with a joystick. Tom said he's in the process of refining the design so he can patent and sell it. His mother, a devout Catholic, jokingly calls the wheelchair mower, "The Popemobile," because it has a clear, protective cover over the cockpit.



Bernie lives in Fairbanks, along with brothers Chuck Karl and Tony Karl. Chuck said Bernie, too, is an unconventional problemsolver, one not afraid to stand his ground, whether it be a showdown with the state Fire Marshall over his ice hotel or following through on a risky investment.

"It takes a wheelbarrow to haul his balls around, if you know what I mean," Chuck said.

Critics in Fairbanks roll their eyes at some of his ideas, like the one that supposedly involved harnessing helium gas produced by Chena Hot Springs to give balloon rides. Another one of his ideas entailed using dirigibles, or blimps, to transport rockets to a state-owned launcher on Kodiak Island. That one never took off either.

His wife, Connie, tries to keep Bernie grounded. "Sometimes you don't know what's a real idea and what's just talk, so you have to kind of wait and see," she said.

That's not always been easy for some who do business with Karl. Some say he makes sure he doesn't foot the bill if his big ideas go sour. Others warn you must watch your back; because if Karl is left to his own devices, you could end up losing.

Wayne E. King, a longtime Fairbanks resident, sold Karl about 20 acres of land, which Karl uses for his recycling business. "All I'll say about Bernie is he's a character," King said.

But how's he to do business with?

"You have to be careful," King said, adding "there'd be no point in elaborating on that. He doesn't owe me any money. How's that?"

Cliff Burglin, another longtime Fairbanks businessman, put it this way: Bernie always lands on his feet. "Bernie's going to look out for himself and his family first, which ... i isn't necessarily bad, but is not too good if you're dealing with him."

Bernie himself said he can drive a hard bargain, but he's always fair. "I can tell you no one's lost any money ever dealing with me on anything."

Bernie Karl's ascent to risk-taker follows some of Alaska's biggest events in the last 30 years, from the construction of the trans-Alaska oil pipeline to the Exxon Valdez oil tanker spill. Karl has found a way to profit from each, although it was his father's link to Caterpillar that got him headed to Alaska.

He was about 20 years old working at Caterpillar's Illinois factory when he landed a job with a Seattle machinery dealer. He was given a choice between transferring to Fairbanks or Whitehorse, Yukon. He chose Fairbanks and worked in a warehouse for about six months before taking a job on the pipeline in 1974.

"My first time up north," he said, "I stayed 51 weeks, because I was getting three square meals a day, the biggest variety of food I ever had in my life."

He turned 21 on the pipeline. When he filled out his employment paperwork, he listed his age as 34. Why? "It was OK to have a brain and think if you were 34."



Karl also needed to be older for his soon-to-be wife. He met Connie in the mid-1970s when she was driving a bus on the North Slope. Connie, who is 14 years Karl's senior, soon learned Bernie's true age when she came across his identification while doing laundry.

She cried at the time, Bernie said, but today his wife says the age difference hasn't mattered. Bernie calls his marriage the great success of his life.

After the pipeline was finished in 1977, Bernie turned to one of Fairbanks' oldest and riskiest trades: mining. He worked claims with his brothers. After seven years, he wasn't losing his shirt, but he wasn't hitting the mother lode either. "We paid all of our bills. We didn't owe anything, and all of our equipment was paid for, so I guess we were semi-successful," Karl said.

He went on to buy giant workcamps, used by oil workers on the North Slope, and shuffled them around the state. In 1989, for instance, he floated a 1,000-man workcamp on barges to aid the cleanup of the Exxon Valdez spill. Today, one of his workcamps is split between Russia, the Red Dog Mine near Kotzebue, and a buffalo ranch on Kodiak Island.

Another of Karl's biggest business ventures has been the recycling and salvage trade. He stumbled upon it when he met Cliff Koppe of Washington state. Koppe inherited a scrap business from his late father and was ready to spend his life working in the industry. In the early 1980s, a friend involved in Alaska gold mining put Koppe in touch with Karl.

Karl had knowledge of interior Alaska. Koppe had the experience and connections in the scrap industry. The two launched K&K Recycling in the mid-1980s. The business recovered scrap metal at Fort Wainwright, as well as flattened car bodies, and shipped the stuff out of state.

The price of scrap was low in those days, and within about three years, Karl found he could operate the business himself. He dissolved his partnership with Koppe in 1986.

"Bernie was the type of partner that was always chasing the pot of gold at the end of the rainbow and, of course, I was a guy that was a little bit of a plodder," Koppe said.

The same year Bernie severed his ties with Koppe, he was convicted of disorderly conduct for an incident apparently involving K&K Recycling. He believed a man named Rodney Willett owed him money. Karl grabbed Willett by the hair, pulled him out the window of a 1972 El Camino and threatened to "hurt him in a bad way," according to court records.

Bernie Karl remembers the incident differently, claiming he was the victim and Willett was the aggressor. Bernie said the confrontation began after Willett deceived his brother - and later told Bernie his brother was a "fat motherfucker" - during a sale at K&K Recycling.

"Needless to say, (Willett) wasn't too happy with the outcome," Karl said.

The Chena Hot Springs Resort is a popular international tourist destination, but that wasn't always the case. Others had tried to make a go at it 15 years ago, but the property ended up in the hands of the state and KeyBank in 1990.

The Alaska Industrial Development and Export Authority, a state agency charged with spurring development and creating jobs through loans and guarantees, managed the resort during most of the 1990s. It lost \$1.2 million alone between 1991 and 1993, according to a state audit. The property, the audit said, was worth an estimated \$3.5 million in 1993.

AIDEA covered the losses and spent thousands more trying to spruce up the resort. The agency added a new laundry building, generator and employee housing, among other projects. Still, nobody was interested in buying Chena Hot Springs Resort. It seemed the resort was destined to be a classic Alaska boondoggle.

Enter Bernie Karl and his wife Connie. In 1999, the Karls bought the 440-acre Chena Hot Springs Resort for \$1.5 million cash. On the surface, it seemed a good deal. AIDEA had spent nearly \$3 million alone on upkeep and renovations during the previous nine years. But running a resort 56 road miles outside Fairbanks hasn't proven easy for the Karls. Bernie said the resort isn't a big moneymaker (although he expects that to change soon).

There were problems in 2000, when an employee complained to state environmental regulators that he or she had been told by a manager to falsify chlorine records for some of the resort's hot tubs or pool. The Karls pleaded no-contest to a misdemeanor charge of failing to maintain proper chlorine levels, according to regulators. A judge suspended a \$10,000 fine, but placed the resort on two years' probation.

In summer 2002, a forest fire burned on both sides of the road leading to Chena Hot Springs, forcing the Karls to shut down the resort for three weeks. The road also floods annually as the Chena River rises. Last year was particularly bad. The road washed out, and buses, each loaded with up to 50 tourists, were forced to turn around to Fairbanks. In the past five years, Bernie Karl estimates floods alone have cost him and his wife about \$500,000. (He hopes a new culvert project will prevent the road from flooding this year.)

It's enough to make one wonder why Karl would want to expand his resort, let alone build a hotel made of ice. Karl owes his latest venture to a pair of sweet Swedish women with dreams as big as his own.

In 1998, two Swedish exchange students in a graduate business class at the University of Alaska Fairbanks were asked to come up with a creative new business venture. Karolina Oberg and Anna Boestad Froom knew of an ice hotel in Jukkasjarvi, Sweden, that lured Japanese tourists fascinated by the northern lights. They thought a similar building could work in Alaska.

Shortly after they bought Chena Hot Springs Resort, Bernie and Connie Karl learned about the Swedes' ice hotel idea through Brenda Hewitt, then the university's alumni director and today the resort's vice president of marketing and sales. The Swedish women said there originally was talk of their returning to Alaska to launch the hotel, but they instead began careers in the Stockholm area.

Four years later, Karl has erected the first ice hotel in the United States. The Aurora Ice Hotel is built from a historic theater. Champion ice carver Steve Brice is largely responsible for its new incarnation, crafting everything from the bedrooms to the bar to the chandeliers, all from frozen water.

Like other Bernie Karl projects, the ice hotel has been on a roller coaster. Last November, the state Fire Marshal's office ordered Karl to stop work, claiming there were safety concerns. A deputy Fire Marshal said there were too many unanswered questions, and that Chena Hot Springs Resort had failed to submit plans for the hotel.

Meantime, the governor's office said everything was fine, said Hewitt, the resort's vice president. Confusion ensued. Karl never stopped work; although days after the Fire Marshal's order, he did begin referring to the ice hotel as a work of art, rather than a place for people to sleep. "Under my First Amendment rights, I have the right to create an ice sculpture, and that's what we're doing," Karl said at the time.

By late last year, the state agreed to let the project continue, that is with a few additions, such as fire extinguishers and smoke alarms.

Karl won't say how much he's spent on the project, ("If someone else wants to build one, they're going to have to figure it out just like I figured it out.") but he did say it was cheaper than constructing a normal building.

Since it opened in December, the ice hotel has drawn several dozen guests, including one wedding, with three more in the works. Tourists can pay \$15 to tour the ice hotel and another \$15 to buy a drink at the bar, which comes in a glass carved from - what else? - ice. Not all alcohol is suited to a frozen cup, however. "I quickly learned on New Year's Eve that you cannot put champagne in them because it immediately turns to slush," Hewitt said.

Bernie Karl and his ice hotel have enjoyed national media coverage, as well as a special mention by Governor Frank Murkowski at a national governors' conference. Still, it remains to be seen whether it will prove viable.

Fourteen thousand feet of tubing encased in the hotel's walls can be pumped with coolant to help keep the place frigid. It's a technique used for skating rinks, but it's never been tried on an ice hotel (similar buildings in Canada and Sweden operate only seasonally and must be rebuilt each winter).

If the Aurora Ice Hotel doesn't survive this summer, there's no rebuilding, Hewitt said. "I don't think we have enough money to do it a second time... I It's going to have to stay up or it's going to be gone."

Bernie Karl - the energetic dreamer - won't entertain the prospect. "It's not going to melt. It wouldn't dare melt."

Contact Kyle Hopkins at kyle@anchoragepress.com



MERIDIAN

IN THIS ISSUE

A Milestone in Conservation – The Fortymile Herd Crosses the Yukon River for the First Time in 50 Years	1
Interview: Janet McGrath on IQ	5
Investigating Cultural Adjustments to Environmental Change in the Arctic	10
What's New	12
C-CIARN North Online Conference	13
European Research: Sixth Framework Program (FP6)	14
Letters	14
Book Review: Muskox Land	15
Horizon	16

A MILESTONE IN CONSERVATION – THE FORTY MILE HERD CROSSES THE YUKON RIVER FOR THE FIRST TIME IN 50 YEARS

Richard Farnell

*A hundred here, a thousand there
A score down in the hollow
Spread far and wide in countless bands
As far as glass could follow*

*Three days we camped there in their midst
Our work around completing
Though all northward held their course
We noticed no depleting.*

– H.S. Bostock, 1979¹

The history of the Fortymile herd is a legacy of human abuse, mistaken assumptions, and successful recovery efforts. From the Yukon gold rush days to the present, the herd went from hundreds of thousands to near extirpation due mainly to the frontier attitudes of the time. Today, with modern wildlife management techniques and new conservation attitudes, we are witnessing the return of this magnificent caribou herd.

During the early part of the 20th century the Fortymile herd was one of the largest and most important caribou herds in North America and perhaps the world. In 1920 one

of the north's first wildlife biologists, Olaus Murie, tried to estimate its size². While crude by today's scientific standards, Murie's account of the migrating herd showed that it was immense: "The southeast migration of the herd covered a strip approximately 60 miles wide, 40 miles representing the part traversed by the main body and 20 miles that was covered by scattered bands. The herd took 20 days to pass one spot. During eight of the 20 days about 1,500 animals in the main herd passed each day over a one-mile strip, and during the remaining 12 days about 100 a day." Based on these observations, Murie estimated the herd contained 568,000 caribou, with the following caveat: "In light of the subsequent experience, this figure seems conservative and it is safe to say that the herd numbered well over half a million, possibly much nearer a million." Clearly the herd must have been as large as some of the arctic herds we see today when it ranged over a massive (240,000 km²) area between Whitehorse, Yukon, and Fairbanks, Alaska.

The herd is named after the Fortymile River – a tributary forty miles downstream from Ft. Reliance on the Yukon River, the only supply post for prospectors in the region before the gold rush and growth of Dawson City. During this time the Fortymile herd fueled a subsistence economy in a

1 Excerpts from "The Caribou", a poem recounting one of the great migrations of the Fortymile herd in 1933. Packhorse Tracks. Canadian Geological Survey, Open File 650.

2 O.J. Murie, 1935. Alaska-Yukon caribou. *North American Fauna*, 54. U.S. Department of Agriculture, Washington, D.C., USA. 93pp.

part of the world where supplies were infamously scarce and expensive. It was also a wildlife spectacle that amazed thousands of people. The accounts of the migrations across the river were legendary. The waterway became so thick with caribou that riverboats plying the Yukon often had to tie up to the riverbank and let them pass, for fear of getting the animals caught up in their paddlewheels.

But in more recent times a tragic set of events including severe weather, predation and over-harvest led the herd to decline to about 5,000 animals by 1973. As the herd diminished so did its range use, until it no longer migrated from its summer habitats in Alaska to Yukon wintering areas. For many,

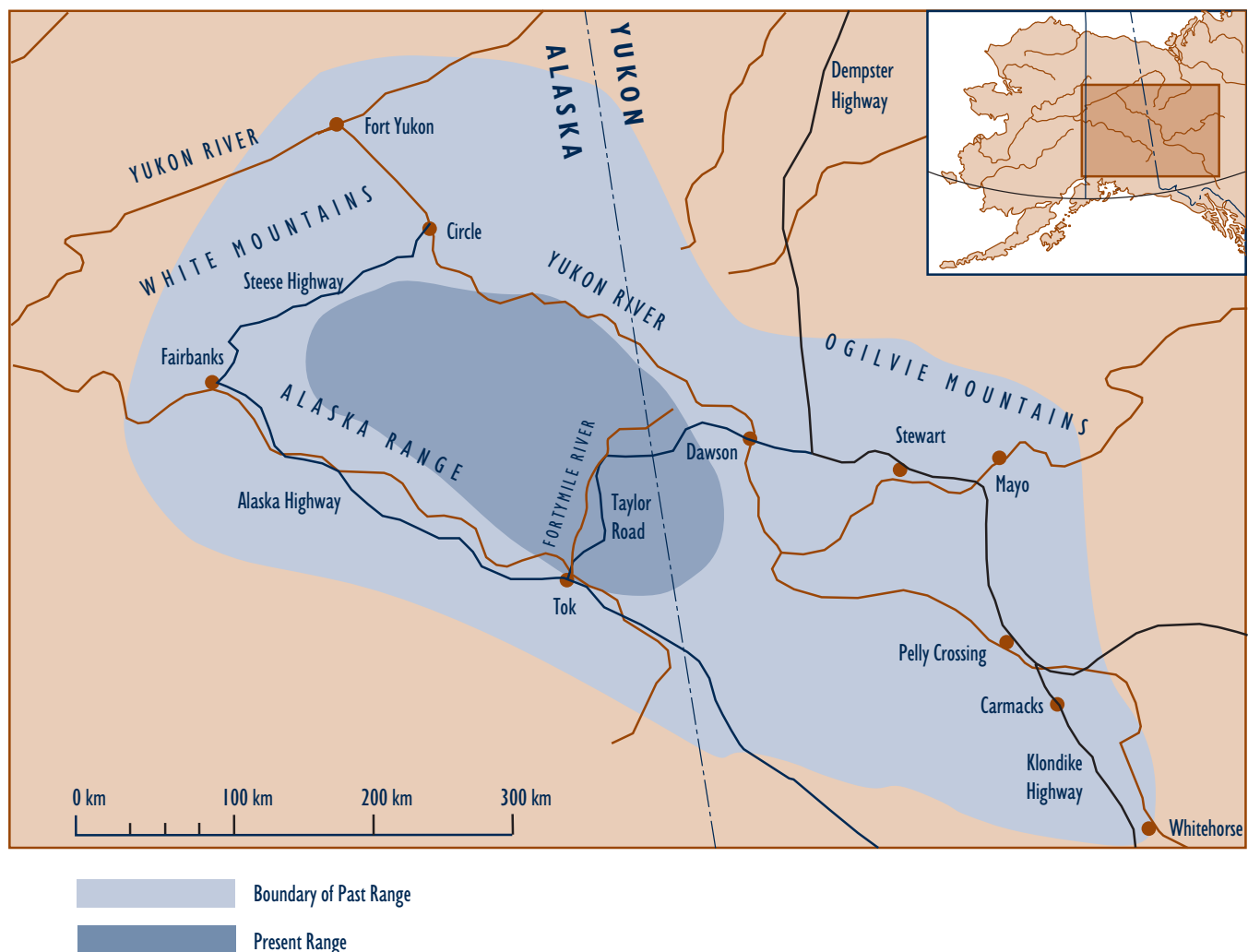
the Fortymile Caribou Herd became a distant memory.

WHAT HAPPENED?

Biologists theorize that the once-large herd may have overgrazed its range. This shortage of food, coupled with high predation rates and unfavourable weather conditions may have caused a natural population decline not unlike the natural fluctuations seen in many of North America's large caribou herds. However in this case a poor understanding of these dynamics during a decline in the 1960s and greater human access brought about by changes to the herd's range served to drive numbers to a tragic low point. Construction and upgrading of the Taylor and Steese highways in Alaska,

and the Top of the World and Klondike highways in Yukon marked a switch in emphasis from water routes to roads. The new roads bisected the herd's migration routes in places the animals could not avoid. Hunting was very popular. Easy road access, and liberal seasons and bag limits combined to produce years of excessive harvest. Wounding losses associated with crowded hunting conditions along the highways were high and could have equalled the reported harvest. The hunting season was not closed by emergency order until 1973 when the herd had dwindled to an unprecedented low of 5,000 caribou.

Past and present range of the Fortymile caribou herd.





While the herd survived the gold mining boom and market hunting that accompanied it, it could not withstand heavy modern mechanized hunting during a natural decline. Some biologists theorize that the 1960s hunting reduced the population to a level well below where it would have bottomed out during a natural decline, and to a point where the force of predation prevented the

Fortymile caribou crossing the Yukon River, a common scene during the early part of the 20th century. The photo was taken from a riverboat. Photo: Yukon Archives.

herd from ever increasing again – a condition called a “predator pit”. This may have been the case, because after a limited wolf control program on part of the herd’s range in Alaska in the early 1980s, numbers

rebounded to 22,000. This program was suspended, however, because of public disapproval of lethal wolf control. The herd consequently remained static until the early 1990s, when calf mortality studies carried out by the Alaska Department of Fish and Game demonstrated that predation was in fact the main limiting factor keeping the herd down. Wolves in particular killed between 2,000 and 3,000 calves annually during this study, and between 1,000 and 2,300 older caribou.

It was thought that if the herd could only increase to about 50,000–60,000 caribou it might escape the suppressing force of predation and return to more representative numbers. Seventy percent of its former range had been unused for many decades and could clearly support a greater herd. This would be significant because recovery of the herd would also strengthen the biodiversity

Market hunters at the turn of the 20th century. Fortymile caribou were an important source of food for people during the gold rush era. Photo: Rasmussen Library Archives, University of Alaska.



of this large ecosystem – an area where predators, scavengers, and other prey species had declined coincident with the loss of the herd.

Moreover, the Fortymile herd has the highest potential of any other to satisfy non-consumptive use by the North American public. Few people are able to witness the great migrations of the arctic herds because of their inaccessibility, while the very feature that nearly destroyed the Fortymile herd, the transportation corridors, would facilitate unique public access for viewing them. Lastly, it became obvious to those concerned that if we do not do something about the herd, the next generation may become complacent and accept the animals as a relic population – assuming a smaller herd to be their natural expression as a species. After all, what do the Labrador duck, passenger pigeon, and great herds of plains bison mean to our generation, who have never experienced them?

It was at this point that the International Fortymile Planning Team, representing Yukon and Alaska communities, environmentalists, hunters, and government agencies developed a holistic recovery plan for the herd. The primary goal was simply ‘to begin restoring the herd to its former range in Yukon and Alaska’. The Team judged the most manageable way to stimulate herd growth was by reducing wolf predation using socially acceptable methods, and to prevent hunting. While it was relatively easy to prevent hunting through regulation, wolf treatment action required a challenging and experimental approach. The Team recognized that criteria such as improved calf survival and increased population growth would be good indicators of success; but more importantly, it was thought that if the herd crossed the Yukon River once again a major milestone would have been reached.

A D E L I G H T F U L S U R P R I S E

In spring 1997 a wolf fertility control program was implemented. Dominant pairs were surgically sterilized and about 140 subordinate and subadult wolves were translocated to other parts of Alaska. In all 16 wolf packs comprising all the wolves in the herd’s calving area were treated in this way. Wolf control went on for five years, until spring 2002. During this time dominant pairs remained and defended their pack territories, but did not reproduce. The sterilized wolves lived longer on average, likely because they did not suffer the stress of reproducing and feeding offspring. Other ecological conditions such as herd nutritional condition and weather factors remained favourable for growth, and the Fortymile herd increased to about 50,000.

In late October 2002 a marvellous sight was seen for the first time in about 50 years: some 30,000 Fortymile caribou migrated into Yukon, and crossed the Top of the World Highway. While expected, it still came as a delightful surprise for those who have followed the fate of this great herd. Many thousands of these caribou moved eastward down the Fortymile River following a historical migration route, and crossed the Yukon River to winter on range not occupied in the living memory of most Yukoners. The survey biologist who first viewed this great scene, by aircraft, reported that a cow and a calf were leading this element of the herd – the first of a new generation of caribou that have found their ancestral home.

The Fortymile wolves will now rebound in numbers, and will likely play a lesser role in the dynamics of the larger herd. If population trends continue, the herd could get to a hundred thousand by the end of the decade and reoccupy much more of its former range.

We’ve learned from this experience that with patience and cooperation, conservationists working together can correct the mistakes of the past and achieve significant goals.



Alaska Department of Fish & Game biologist Rodney Boerje weighing a Fortymile calf during a calf mortality study. Forage and nutrition indices like calf weights were favorable, indicating that range and weather conditions were not limiting the herd; predation was the limiting factor. Photo: Craig Gardner, Alaska Department of Fish & Game.

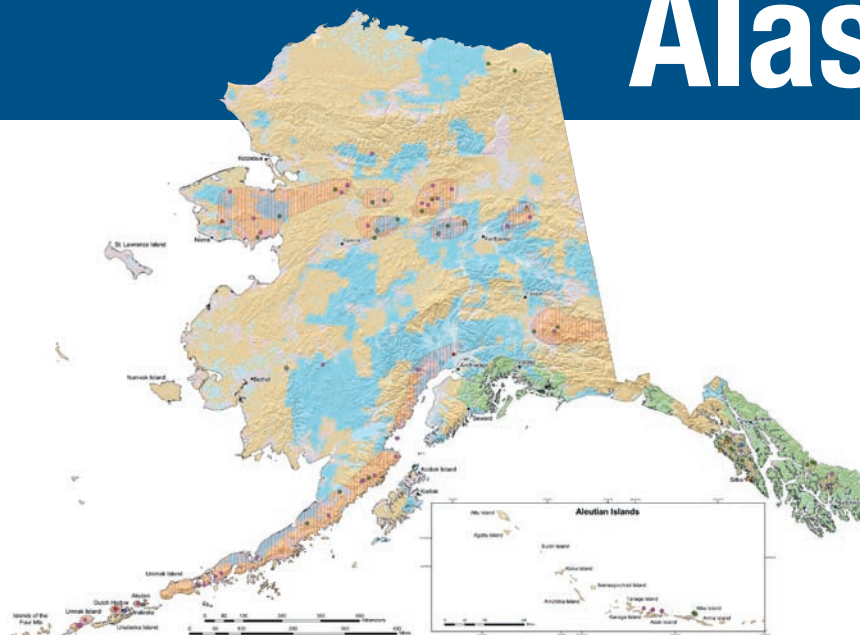
Richard Farnell is a caribou biologist for the Yukon Department of Environment. He has worked with the public and with other professionals for many years to recover the international Fortymile herd.



Geothermal Technologies Program Alaska



This Olympic-size swimming pool at Circle Hot Springs, 162 miles northeast of Fairbanks, is geothermally heated, as is the spa hotel shown in the background.



Much of Alaska's southern coastal region is part of what is known as the Ring of Fire—a volcanic arc that nearly encircles the Pacific Basin. This includes the Aleutian Islands, the Aleutian Peninsula, and Baranof Island in southeast Alaska, all of which have excellent geothermal resources.

Interior Alaska also has several known geothermal areas, stretching from the White Mountains near Fairbanks in the east to the Seward Peninsula, near Nome in the west.

Throughout these geothermal areas, and in some isolated spots, are more than 100 hot springs and fumaroles with temperatures that range from 20°C (68°F) to more than 154°C (310°F).

Current Development

Alaska currently uses 14 of its hot springs primarily for spas or for space heating at the spas. Most notable among these are:

- Circle Hot Springs. The springs, which are located near the Yukon River 162 miles northeast of Fairbanks, produce 386 gallons of steaming water (at 60°C or 140°F) per minute to provide hot water for a spa swimming pool, space heat for the spa hotel, and heat for a greenhouse.

A few of these have the potential for generating electricity; others can be used for direct-use applications.

The drawback is that much of Alaska's geothermal resource is far from population centers. Yet, the U.S. Geological Survey (USGS) has identified several areas that have the potential for economically generating as much as 250 megawatts (MW) of geothermal electric power. This potential may even be far higher, especially if geothermal wells are drilled deep or in the likelihood of attaining supercritical geothermal fluids. Moreover, looking to the future, with the advent of a hydrogen economy Alaska may be able to exploit its geothermal resource to become a leader in the production of hydrogen for the world market.

- Manley Hot Springs. The village of Manley Hot Springs, which is about 160 miles west and north of Fairbanks, once had a thriving resort based around the local hot springs. The village is now a small, quiet town that still offers baths fed by the springs.
- Chena Hot Springs. The geothermally heated pool and facilities at Chena Hot Springs are 62 miles northeast of Fairbanks. It is a popular private resort that offers lodging, dining, mineral baths,

A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.



The geothermally heated pool and facilities is located at Chena Hot Springs, about 60 miles northeast of Fairbanks.

and swimming in the mineral springs. The water from the springs is also used for space heating and for cultivating plants in a greenhouse.

- **Baranof Island.** This island on the southeastern coast of Alaska has several hot springs—including Baranof Warm Springs, Goddard Hot Springs, and White Sulphur Hot Springs—all of which are used for bathing and relaxation.

Proposed Development

Although Alaska generates no geothermal electricity, several areas are being considered for development, including:

- **Unalaska** – This island is one of two places that the state of Alaska has drilled and tested specifically to determine the geothermal potential for electricity generation (the other is Pilgrim Hot Springs, see below). In the heart of the Aleutian chain, this island is home to the city of Unalaska—Alaska’s 11th largest city—whose population of 4,400 swells to more than 10,000 during fishing season. The city is home to several fish processing plants and to the port of Dutch Harbor, which is located on the nearby island of Amaknak and is connected by bridge to the city. The geothermal resource, with a temperature of approximately 202°C (395°F) at 2,000 feet below the surface, is on the volcano, Mount Makushin. The proposed project to exploit the geothermal resource will be privately financed and privately owned and operated. The first phase of the project will consist of an 18-MW geothermal electric generation facility, with electricity from the plant being transmitted 12 miles to the city of Unalaska and Dutch Harbor.

- **Akutan** – Next door to Unalaska is the smaller island of Akutan—home to both the Akutan volcano and to the village of Akutan, which has a large fish processing plant that employs 600 – 1,200 people during peak season. The proposal is to develop the island’s ample geothermal resource by building a 10-MW power plant to provide electricity to the processing plant and the village.
- **Chena Hot Springs** – A feasibility study is now being performed for a 475-kW facility to supply electricity to this resort area. If all goes well, construction will begin in late 2005.
- **Pilgrim Hot Springs** – Located 60 miles north of Nome and 80 miles south of the Arctic Circle, this historically significant site is a unique and lush oasis in the Alaskan tundra. In a region where permafrost is concrete-like and 300 feet thick, Pilgrim Hot Springs has about 2 square miles of thawed ground ideal for trees, shrubs, and truck gardens. This area is currently being explored not just for the production of approximately 5 MW of electric power from the local hot springs but also for geothermal heat. If the project is determined feasible, the hot springs could provide enough electricity and heat to make a reconstituted “Mary’s Igloo Village” (with a projected population of 250 people) self sustaining.
- **Adak** – The geothermal potential of the island of Adak was demonstrated by three wells drilled in 1977 by the U.S. Navy. Adak is a volcanic island that lies on the Great Circle navigation route halfway between Seattle and Japan. This, along with fact that the island is in the middle of one of the world’s richest fishing regions and that it has an established infrastructure—with an airport, deep-water port, major fuel-storage capabilities, utilities, and more—as a result of decades of being a U.S. Naval base, make Adak a prospective area for investment and growth. One of the investments being considered is the possibility of developing the island’s geothermal resource.

Economic Benefits

According to the Geo-Heat Center at the Oregon Institute of Technology, Alaska’s 14 hot springs provide more than 85 billion Btu’s of geothermal energy for use in spas, space heating, and greenhouses. Even though

this is a small amount of energy compared to the state's total energy consumption, it does serve to offset the use of other energy—generally that of diesel fuel. But the greatest impact has been on the tourist industry, where hot springs draw thousands of visitors who spend millions of dollars each year.

A far larger economic impact, however, will come with the development of geothermal electric power plants. The imminent 475-kW plant at Chena Hot Springs, for example, will address the immediate energy needs of the resort area by replacing \$300,000 of diesel fuel per year. By so doing, the plant will have a 3-year payback.

In addition to addressing the immediate energy needs of local communities, geothermal energy also offers the potential for communities to expand their industrial and employment base by providing a stable source of competitive electric energy to energy intensive users. This has already happened in Iceland, for example, where clean, state-of-the-art, high-energy-usage facilities have been built to take advantage of that country's low-cost, sustainable, geothermally generated electric energy.

In Alaska, the potential for using geothermal energy for industrial expansion is particularly promising to some of the islands of the Aleutian chain. The proposed geothermal plant at Akutan, for example, will do more than simply offset a substantial portion of the 43 million gallons of diesel consumed on the island per year, or alleviate the rising cost of diesel generated electricity by providing a local, low-cost, sustainable resource. It will also provide a clean energy resource that will help expand the fish processing industry, whose growth is currently limited by diesel emissions that cannot comply with clean-air regulations.

For nearby Unalaska the economic potential is even greater. Unalaska/Dutch Harbor—a sheltered, world-class, deep-water port—is the busiest fishing port in the United States, where hundreds of millions of pounds of fish and seafood are processed yearly. The city has a 4-star hotel, daily scheduled airline and air charter service, and a fish-processing industry that represents an investment of about \$1 billion.



Moreover, there is a likelihood on Unalaska (as elsewhere in the Aleutian arc) of attaining supercritical geothermal fluids (temperatures greater than 400°C or 752°F) at drillable depths. This would provide levels of energy at about an order of magnitude greater than comparable, lower temperature wells. The enormous heat, flow rate, and pressure generated would contribute to more efficient production of electric energy and hydrogen. This, together with a world-class port located near the Great Circle shipping route from major west coast ports to the Pacific Rim, would be a major benefit for Alaskan commerce, including energy commerce.

Technical Capabilities

The Alaska Energy Authority offers assistance and technical information on geothermal and other alternative energies. It also cooperates with the USGS, the U.S. Department of Energy, and others to assess the geothermal resource in Alaska and its potential uses.

The University of Alaska Fairbanks' Geophysics Institute and Department of Geology and Geophysics perform research and analyses on a variety of geophysical topics, including volcanology and geothermal energy.

Dutch Harbor, part of the city of Unalaska, is a world-class, deep-water port and the busiest fishing port in the United States. Developing the ample geothermal resource on the island of Unalaska would be a boon to the port and to the rest of the island's industry and commerce.



Part of the old orphanage at Pilgrim Hot Springs, Our Lady of Lourdes Church is still standing.

History

The history of Alaska's geothermal use is the history of the development of its hot springs. Some of these areas, such as the remote Serpentine Hot Springs on the Seward Peninsula, were used by Inupiat shamans before Charles McClellan "discovered" the springs in 1900. Today, the hot springs has a bathhouse, a large cabin for sleeping, and a nearby airstrip.

Pilgrim Hot Springs, also on the Seward Peninsula, had been used by local Alaskan natives well before modern recorded history. During the Nome Gold Rush days (1900+), this area became a popular place to visit, and to grow and cook fresh food. The worldwide pandemic flu epidemic of 1918-19 devastated this area, killing 1,200 people and leaving many children orphaned and homeless. Catholic Jesuit priests and Ursuline nuns built an orphanage—Our Lady of Lourdes Mission—at Pilgrim Hot Springs to take care of the children. The mission survived until 1942, by which time the children had grown. During World War II, Russian and American Pilots flew from Nome to Pilgrim Hot Springs and used the spa for rest and relaxation. Since the war, the area has largely been abandoned, with occasional visitors to the hot springs. Currently, however, there is a venture to explore the geothermal resource in the area and establish a self-sufficient village.

Goddard Hot Springs on Baranof Island was also visited by natives well before Europeans first saw it in the mid 1800s. By the late 1800s, the area had cabins and frame buildings for visitors. In the 1920s a hotel was built to accommodate visitors, but it fell into disuse in the 1940s. Today, the city of Sitka owns the hot springs and keeps a bathhouse there for recreational use.

Circle Hot Springs was used by the Athabascans well before the gold rush days. It was first encountered by non-native William Greys in 1893, whence it became a favorite of local miners, especially during the winter. It was developed into a resort in 1909.

Today's most popular Alaskan hot springs resort—Chena Hot Springs—was discovered by Robert and Thomas Swan in 1905. It quickly became a popular place for prospectors to visit for easing their aches and pains. By 1911 it had been developed into a small resort. It has since become a premier resort, attracting people from all over the world.



GEOPOWERING THE WEST

GeoPowering the West is a cooperative federal, state, and local effort to promote awareness of the vast geothermal energy resources in the western United States, including Alaska and Hawaii. GeoPowering the West partners with businesses, government officials, Native American groups, utilities, and energy consumers to expand the use of geothermal energy.

For more information contact:

EERE Information Center

1-877-EERE-INF (1-877-337-3463)

eereic@ee.doe.gov or visit: www.eere.energy.gov

Alaska Energy Authority/AIDEA

Bernie Smith, bsmith@aidea.org

(907) 269-4643 or visit:

www.aidea.org

Geo-Heat Center

John Lund, Director

Oregon Institute of Technology

(541) 885-1750 or visit: geoheat.oit.edu

U.S. Department of Energy Western Regional Office

Curtis Framel, Curtis.Framel@EE.DOE.GOV

(206) 553-7841 or visit:

www.eere.energy.gov/regions/western

U.S. Department of Energy GeoPowering the West

Susan Norwood, National Coordinator,

susan.norwood@hq.doe.gov

(202) 586-4779 or visit:

www.eere.energy.gov/geopoweringthewest

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CUAUHTEMOC - Mexico



The last of a series of four windjammers built by the naval shipyards of Bilbao, Spain (after the *Gloria* for Columbia, the *Guayas* for Ecuador, and the *Simon Bolivar* for Venezuela), the Mexican Navy training ship *Cuauhtemoc* bears the name of the last Aztec emperor who was imprisoned and executed in 1525 by order of Herman Cortes the conquistador.

The training tall ship *Cuauhtemoc* was built in the *Celaya* shipyards (Bilbao, Spain) and was completed in July 29, 1982 when it was delivered to its first crew, the Mexican Navy.

The *Cuauhtemoc*, known as the Ambassador and Gentleman of the Seas, a tireless navigator, has trained twenty-one generations of officers and it has sailed 408,853 miles in 3,178 days.

It has received many awards and recognition from different countries: the "Cutty Sark-1998" and "Cutty Sark-2000" trophy, which is awarded to the crew who most contributed to friendship and international understanding during the regatta. Two years later it won second place in the Baltic 2000 Regatta sailing from Gdansk, Poland, to Helsinki, Finland.

In 2002 and 2003 it won the "**Boston Teapot**" given by the American Sail Training Association to the training tall ship that sails the most distance during a continuous period of 124 hours, crossing the Atlantic Ocean (*America-Europe, Europe-America*), between the months of March to October.

The *Cuauhtemoc* took part in the 2004 Atlantic Tall Ships Challenge® Race Series, visiting host port cities along the Atlantic Coast of North America, including Halifax, Nova Scotia, and Saint John, New Brunswick, to name just a few.

Information

Flag:



Rig:



Barque

Country:

Mexico

Built:

1982; Celaya Shipyards (Bilbao, Spain)

Crew:

218 - Trainees: 0

Home port:

Acapulco, Mexico

Designer:

n/a

Certification:

n/a

Web Site:

n/a

Email:

n/a

Who sails?

sail training to junior officers and non-commissioned officers

Program type:

n/a

Specifications

LWL: 220.4'

LOD: n/a

LOA: 90.5 m

Draft: 39.4'

Beam: 12 m

Rig Height: n/a

Sail Area: 25.489 sq ft

Tons: 1800 GRT

Power: 1125 hp Diesel

Hull: Steel

Freeboard: n/a

LADY WASHINGTON - U.S.A.



History tells us that in approximately 1750, the 90-ton trading vessel Washington was built on Essex River, Massachusetts. Some 20 years later she was renamed Lady Washington. In the summer of 1787, the investor group of Bullfinch, Barrell & Company purchased both the Lady Washington and the three-masted ship Columbia Rediviva. The new colonies were without a source of tea and the investment company envisioned a high yield business scheme in trading with China.

In October of the same year, the Lady Washington and the Columbia set out from Boston with Captains Robert Gray and John Kendrick respectively. The pair sailed around Cape Horn and up the west coast of the Americas. Her hold filled with sea otter pelts, the Columbia sailed the Pacific crossing, leaving the Lady to continue trading off the northwest coast of North America. Once in China, Columbia traded her cargo for tea, cloth and porcelain. This continued for a time, but eventually there was an illegal takeover of the Lady's mission by Captain Kendrick. In all her voyages of discovery, the Lady Washington sailed her way into history.



Fast forward to the 1980s. A group of people in Aberdeen, Washington became fascinated by the colorful stories of the Lady Washington. Realizing the unique position of Aberdeen and Grays Harbor in United States history, these people came up with a huge idea: build replicas of the famous craft, and use it as a platform to teach seamanship and the history of Washington State. Through a mammoth volunteer effort, the Lady Washington was launched in 1989 in time for Washington State's centennial celebrations.

"The Lady" has also starred in the films ***"Pirates of the Caribbean"***, and ***"Star Trek - Generations"***.



Information**Flag:****Rig:**

Brig

Specifications**LWL:**

58'

LOD:

69.9'

LOA:

87'

Country:

United States of America

Built:

1989; Aberdeen, Washington, Grays Harbour

Crew:

12 - Professionals: 7 , Volunteers: 5; 48 day sails, 8 overnight

Home port:

Aberdeen, Washington, U.S.A.

Designer:

n/a

Certification:

n/a

Draft:

11'

Beam:

24'

Rig Height:

89 ft main mast

Sail Area:

4443 sq ft

Tons:

99 GRT

Power:

318 hp

Diesel

Hull:

Wood

Freeboard:

6'

Web Site:www.ladywashington.org**Email:**

n/a

Who sails?

Youth trainees, individuals, families, and groups of all ages.

Program type:

Sail training for paying trainees; passenger day sails, overnight passages, and family camps; dockside interpretation

R. TUCKER THOMPSON - New Zealand



The R. Tucker Thompson is based at Opuia, in the Bay of Islands, New Zealand. She embodies the best features of a traditional 18th century design of a West Coast halibut schooner, married to the materials of today. She has a very high reputation in the traditional sailing world and is considered a perfect example of a working Tall Ship with the advantage of being new and safe.

Built in the early 1980s in Whangarei by Todd Thompson and the Harris family, she was launched in 1985. During summer months, the tall ship R. Tucker Thompson takes visitors for day trips in the beautiful Bay of Islands as well as providing an ideal location for weddings, evening cruises and other special events. In the off season, the ship is used for youth development programs, leadership development programs and other corporate teambuilding activities.



Since then, she has had many adventures and been involved in various film productions, including the Rite of Passage for the Australian First Fleet bi-centennial program where she sailed round the world as part of the re-enactment of the discovery of Australia. The R. Tucker Thompson has made several voyages around the Pacific Islands, including sailing as part of the peace flotilla which went to Mururoa to protest against French nuclear testing.



Information

Flag:



Rig:



Topsail
Schooner

Country:

New Zealand

Built:

1985; Whangarei, New Zealand, Todd Thompson and the Harris family

Crew:

5 - Trainees: 10

Home port:

Opuia, Bay of Islands, New Zealand

Designer:

Todd Thompson

Certification:

n/a

Web Site:

www.tucker.co.nz

Email:

info@tucker.co.nz

Who sails?

Youth trainees, individuals, families, and groups of all ages.

Program type:

Sail training for paying trainees.

Specifications

LWL:

n/a

LOD:

60'

LOA:

85'

Draft:

8' 6"

Beam:

16'

Rig Height:

n/a

Sail Area:

3000 sq ft

Tons:

60 GRT

Power:

180 hp
Diesel

Hull:

Steel

Freeboard:

n/a

LYNX - U.S.A.



The square topsail schooner Lynx has been designed and built to interpret the general configuration and operation of a privateer schooner or naval schooner from the War of 1812.

She is fitted with period ordnance and flies flags and pennants from the 1812 era. To complement her historic character, the Lynx crew members wear period uniforms and operates the ship in keeping with the maritime traditions of early 19th Century America.

Lynx also operates as a sail training vessel to serve as a classroom for the study of historical, environmental, and ecological issues. In addition, she undertakes "cruises of opportunity" that lead to personal growth and awareness through the experience of life at sea aboard a traditional sailing vessel.

Lynx is guided by the maxim, "Be Excellent to Each Other and To Your Ship."



Information

Flag:



Rig:



Topsail Schooner

Country:

U.S.A.

Built:

2001 in Rockport, ME

Crew:

5 Trainees - passengers: 40 day sails, 6-8 overnight

Home port:

Newport Beach, CA

Designer:

Melbourne Smith

Certification:

n/a

Web Site:

www.privateerlynx.org/index.html

Email:

lynx@privateerlynx.org

Who sails?

School groups; individuals and families

Program type:

Sail training for volunteer and paying trainees; sea education in maritime history; passenger day sails and overnight voyages; dockside interpretation

Specifications

LWL: 72'

LOD: 76'

LOA: 78'

Draft: 8'6"

Beam: 23'

Rig Height: n/a

Sail Area: 4669 ft²

Tons: n/a

Power: 290 hp Cat

Hull: Wood

Freeboard: 3' 6"

BILL OF RIGHTS - U.S.A.



A two-masted wooden gaff topsail schooner, the Bill of Rights is owned by the Los Angeles Maritime Institute, LAMI. She is leased and operated by Grays Harbor Historical Seaport Authority of Aberdeen Washington.

Bill of Rights has sailed extensively on the East Coast of North America and the Caribbean serving at-risk youth. This is the Bill of Rights' first trip to the Pacific Northwest.

Information

Flag:



Rig:



Topsail
Schooner

Country: U.S.A.
Built: 1971 by Harvey F. Gamage
Crew: n/a
Home port: Norfolk, VA
Designer: McCurdy, Rhodes & Bates
Certification: n/a

Web Site: www.lamitopsail.org/index.asp
Email: n/a
Who sails? Youth groups
Program type: Sail training to provide youth with real-life challenges that develop knowledge, skills and attitudes needed to live healthy, productive lives. This multi-award-winning program has become a model program for others, worldwide

Specifications

LWL: n/a
LOD: n/a
LOA: 129'
Draft: 10'
Beam: 23'
Rig Height: 100'
Sail Area: 6,300 ft²
Tons: 117
Power: 220 hp,
 V8, Cat
Hull: n/a
Freeboard: n/a

PALLADA - Russia



Built 1988 in a series of sail training ships in Gdansk, Poland. Her sisters are the "Druzhba" (1987), "Mir" (1987), "Khersones" (1988) and "Nadezhda" (1989), smaller but very similar is the "Dar Młodzieży" (1981).

Sail training ship of the Eastern State Technical Fisheries University in Vladivostok, Russia.

She visited Falmouth in 1989 on her voyage to Vladivostok, participated in the Grand Columbus Regatta in 1992, and took part in the Cutty-Sark-Races 1997 from Hong Kong to Osaka.

Information

Flag:



Rig:



Full Rigged
Ship

Country:

Russia

Built:

1988; Stocznia Gdanska, Gdansk, Poland

Crew:

56 Trainees-passengers: 143

Home port:

Vladivostok, Russia

Designer:

Zygmunt Choren

Certification:

n/a

Web Site:

n/a

Email:

n/a

Who sails?

Marine-college cadets

Program type:

Sail training and sea education for marine-college cadets

Specifications

LWL:

n/a

LOD:

n/a

LOA:

356'

Draft:

22.4'

Beam:

45.9'

Rig Height:

n/a

Sail Area:

2771 m²

Tons:

n/a

Power:

2x570 hp
Diesel

Hull:

Steel

Freeboard:

n/a

ZODIAC - U.S.A.



Built for the heirs to a manufacturing fortune, Zodiac was designed to epitomize the speed and beauty of the American fishing schooner.

She continued her working life as a Bar Pilot schooner in San Francisco. She was the last American schooner still working in that capacity in the United States when she retired from the bar in 1972.

The Zodiac is the largest working schooner on the West Coast. It is a U.S. Coast Guard Certified vessel. It is fully equipped to take up to 24 passengers comfortably on a week-long cruise. The Zodiac is operated by licensed Captains and experienced crew in the protected waters of the Pacific Northwest.

Novice and experienced sailors alike will love the challenge of standing watch and taking a turn at the wheel. Seals, otters, orcas and other wildlife frolic alongside the ship as you sail through the emerald waters of Puget Sound and the Strait of Juan de Fuca.

As a member of the American Sail Training Association (ASTA), the Schooner Zodiac offers hands-on sail training to all levels of sailors. You will become part of the crew by helping raise the sails, standing watches, charting the course, and taking the helm. Some of the skills you will learn are navigation, knot tying, and sailing theory. Sail the San Juan Islands, Desolation Sound, Gulf Islands or Victoria aboard this beautifully restored 1924 schooner. After a day of sailing, enjoy kayaking, trips ashore and beautiful sunsets

The Zodiac's unique history comes alive as the Captain and crew literally "show you the ropes." All aboard learn and participate in the tradition of tall ship sailing. As you take part in onboard activities, you'll feel the power and grace of the historic vessel responding to the wind.

Information

Flag:



Rig:



Two Masted
Schooner

Specifications

LWL: 101'

LOD: 127'

LOA: 160'

Draft: 16'

Beam: 26'

Rig Height: 101'

Sail Area: 7000 ft²

Tons: 147 GRT

Power: Diesel

Hull: Wood

Freeboard: 5'

Country: U.S.A.

Built: 1924; Hodgdon Brothers Shipyard, East Boothbay, ME

Crew: 8 Trainees-passengers: 49 day sails, 24 overnight

Home port: n/a

Designer: William H. Hand, Jr.

Certification: n/a

Web Site: www.starsailcruises.com/vessels/zodiac/index.htm

Email: info@starsailcruises.com

Who sails? students; families, groups, and adults of all ages

Program type: Sail Training, private charters & individual cruises

