

SUMMER SALMON INSTITUTE – GRIZZLIES & GLACIERS STUDY ADVENTURE

Available for any group booking of 12 or more people. Please contact Thom Henley
(thomhenley@gmail.com)

OVERVIEW



The Summer Salmon Institute – Grizzlies & Glaciers Study Adventure is scheduled to be an annual event held at the beautiful “Soaring Spirits” Camp on the legendary Skeena River near Kitwanga, British Columbia. What better place to learn about salmon, the Northwest Coast’s most vital resource, than in one of the largest wild salmon rivers in North America where all five species of Pacific salmon are found in abundance?

The Skeena watershed boasts the largest steelhead in the world and the oldest fossils depicting the early evolution of salmon as a species. It is also a river where four distinct Native Nations – the Tsimshian, Gitksan, Wet’suwet’en and Neduten still depend on salmon as a staple in their diets.

This region is phenomenally rich in wildlife with three distinct bear types - grizzlies, black bears and the white Kermode bears. Huge glacial fields, the world’s largest granite mountain range and extensive lava beds from Canada’s most recent volcanic eruption are but a few of the geological features available for study.

Ecosystems are rich and varied with temperate rainforests, interior deciduous forests, alpine meadows, sphagnum bogs, lakes, rivers, wetlands, marine estuaries, inter-tidal zones and rich marine environments - all offering wonderful opportunities for hands-on learning.



The Summer Salmon Institute is designed to get teachers and students out of the box of academia and immerse them in experiential learning. It will draw on the expertise of leading researchers in the field as well as the wisdom of native elders, conservation organizations and sport, commercial and native food fishermen. Combining fun and adventure with formal studies, it offers a rare opportunity to learn more about salmon, other cultures and the wonders of the natural world in northern British Columbia and Southeast Alaska.

GUEST SPEAKERS: (*confirmed)



Dr. Tom Reimchen

University of
Victoria, B.C.



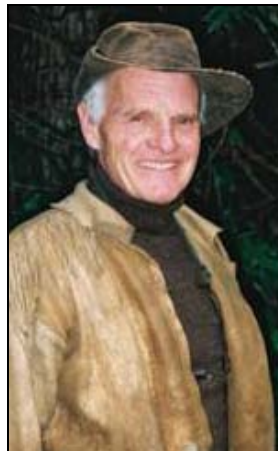
Alexandra Morton

Field biologist
studying
ecological
impacts of
Salmon Farms



Esther Lev

Director of
Watershed
Conservation -
Portland Oregon



Dr. Bristol Foster

Former Director
Royal B.C.
Museum & B.C.
Ecological
Reserves



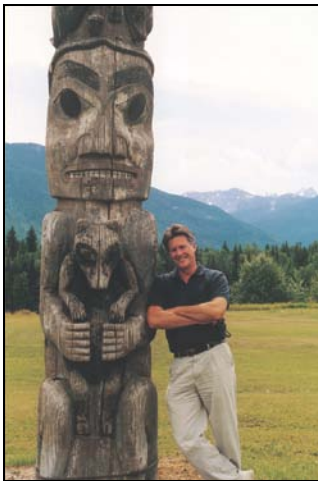
**Tom
Murdoch**

Executive
Director
Adopt-a-
Stream
Foundation,
Everett,
Wash



**Todd
Stockner**

Angling
guide – Co-
Founder
Skeena
Watershed
Coalition



Thom Henley

Founder &
Honorary
Director of
Rediscovery
International
Foundation
and Soaring
Spirits Camp



Jim Angus

Gitksan
Wolf Clan
Chief,
Kispiox,
B.C.



**Bob
Fraumeni**

CEO Finest
At Sea
Seafoods,
Victoria, B.C.

ITINERARY

Day One

Study Focus: alpine ecology & hydrology, salmon evolution fossil records, ancient fishing techniques and Wetsuweten native culture, salmon in the North Pacific ocean ecosystem

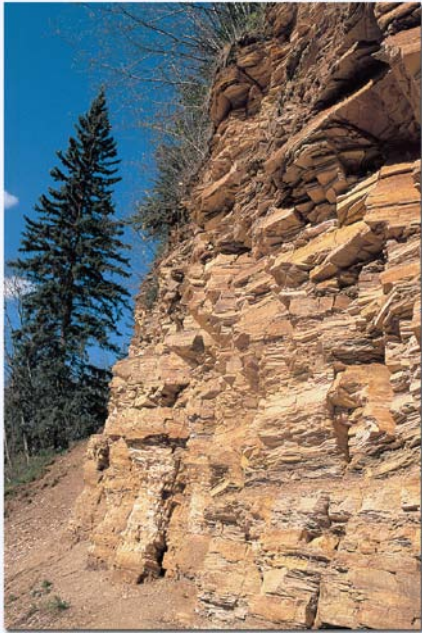
- We begin our adventure at the Hudson Bay Lodge in Smithers, B.C. - a charming northern community that is accessible by air, train and bus connections from the south.



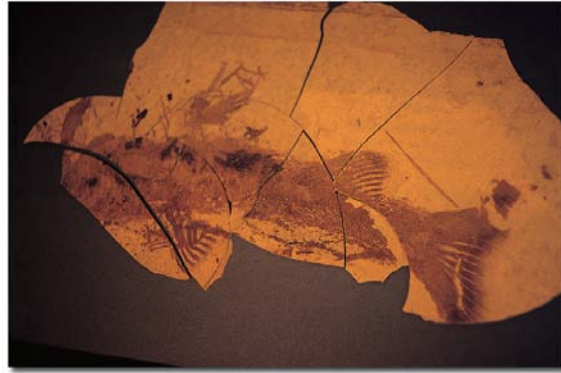
- After brief introductions and an orientation session, we transfer by mini vans to the beautiful alpine meadows of Hudson Bay Mountain for a picnic lunch amidst the wildflowers, mountain goats and hoary marmots. Here, esteemed scientist and explorer Dr. Bristol Foster will speak on adaptations of alpine vegetation. We will also witness how snowfall and glacial melt

help regulate the hydrology of watersheds for salmon production.





- Descending from the mountain, we drive a short distance to the Smithers Museum and Driftwood Fossil Beds to see the earliest fossil evidence in the evolution of salmon. Dr. Tom Reimchen will conduct an informal lecture at this site on salmon evolution.



- Not far away is the Bukley River Canyon where Wet'suwet'en native fishermen gaff and net salmon in the falls with techniques they have employed since the last ice age. An excellent museum here chronicles 9,000 years of indigenous technologies developed to harvest salmon.



- Arriving at the Soaring Spirits Camp, nestled between the legendary Skeena River and the glacier-capped Seven Sisters Mountains, guests will check in to their deluxe tents and enjoy a traditional feast and words of welcome from Gitksan chiefs.



- The first formal presentation in our lecture series will take place this evening with Dr. Tom Reimchen, University of Victoria speaking on the role of salmon and herring in the North Pacific. This talk will provide information on the importance of these two fish to the diversity of sea birds, marine mammals and fishes.





- Later, an evening Council Fire under the stars will help everyone get to know one another.
- Overnight: Soaring Spirits Camp

Day Two

Study Focus: ocean to forest salmon connectivity, and the crisis in our fisheries

- Right after breakfast, Dr. Tom Reimchen from the University of Victoria opens the day with a fascinating lecture on the linkages between salmon, bears and forests. Recent evidence suggests a major interaction between salmon and the canopy of the ancient forests adjacent to the salmon streams of the north Pacific.



- After lunch Dr. Reimchen will lead the group on a short hike to the confluence of Boulder Creek and the Skeena River where he will conduct his next lecture on salmon, isotopes and tree rings. Here participants will have hands-on lessons in identifying past history from the cores of ancient trees growing along a salmon river.



- Following a delicious dinner back at the Soaring Spirits Camp, Dr. Reimchen will treat us to two more fascinating lectures. Lecture 4: What happened to all the fish in the ocean? The assumptions and failures of Fisheries science, and Lecture 5: Solutions for the fisheries crisis.
- Overnight: Soaring Spirits Camp



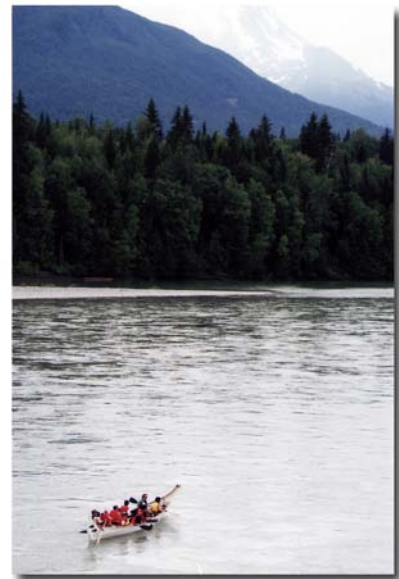
Day Three

Study Focus: Spirit Bears, Gitksan native culture and the importance of salmon in NW Coast civilizations

- Right after breakfast, we will be treated to a final lecture by Dr. Reimchen based on his current research on the ecology, genetics and life history of the Spirit Bear. The white Kermode or “Spirit Bear” is found in the vicinity of the Soaring Spirits Camp and there is a chance we might spot one during the 11-days of the institute.



- Following the lecture, participants set off for a full day of adventure. While half the team has an opportunity to fish for sockeye and steelhead at the confluence of the Kispiox and Skeena Rivers (fresh water license and Gitksan permits required), the other half will paddle a traditional NW Coast freight canoe down the Skeena.



- At mid day, both groups will share lunch together at historic Hazelton before exchanging activities. The recreated Gitksan village at Ksan offers a picture perfect setting for the change over and a fascinating glimpse into Gitksan traditional life.



- Putting it all in perspective, Jim Angus a Hereditary Chief of the Gitksan Wolf Clan will be the featured speaker at the Council Fire site after dinner.
- Overnight: Soaring Spirits Camp

Day Four

Study Focus: restoration and stewardship – bringing back salmon habitat in developed areas, benthic macro invertebrates, development threats to salmon rivers and a look at native food fisheries from netting to traditional processing

- Right after breakfast, Tom Murdoch will draw from his many years experience directing the Adopt-A-Stream Foundation in Washington State to present a model for community participation in restoring salmon waterways.
- Tom will then lead participants to Price Creek to investigate benthic macro invertebrates and discuss the vital role streambed invertebrates play in healthy salmon watersheds.

Our guest speaker after lunch will be Todd Stockner, a local angling guide and co-founder of the Skeena Watershed Coalition. Todd will discuss commercial development threats to salmon rivers using the Skeena as an example.



- Later in the afternoon, participants will get first hand knowledge observing the Kitwanga native food fishery and receive hands-on lessons from local artist, chef and food gathering expert Val Morgan in smoking and processing salmon according to time-honored traditions.

- A traditional Gitksan feast - featuring salmon prepared in many delicious ways – and native dancers will highlight our final night at the Soaring Spirits Camp.
- Overnight: Soaring Spirits Camp



Day Five

Study Focus: wetland functions and values in salmon production, and grizzly bear predation on spawning salmon



- Participants depart from the Soaring Spirits Camp on the banks of the Skeena River and drive 2-hours north to Southeast Alaska. Along the way there will be a stop at Kitwankool to view the worlds oldest totem poles.
- At the watershed divide between the Skeena and Nass Rivers, we will stop again for a talk by Oregon biologist Esther Lev on wetland ecology – its functions and values in terms of salmon production.



- The drive through the Coast Mountain Range that leads us from the interior to the Pacific is considered one of the most scenic stretches of highway in North America and there will be ample opportunity to stop for picture taking – especially where the Bear Glacier descends from a dramatic mountain pass near the highway.
- Crossing into the virtual ghost town of Hyder, Alaska, we head straight for Fish Creek and one of the best grizzly bear viewing locations in the world. From the safety of an elevated cedar walkway, one can get unobstructed and intimate views of grizzly and black bears catching the world's largest chum salmon in spawning beds.



- Alaskan biologists with the Tongas National Forest will be on hand to answer any questions on bear feeding behavior at this site.



- Returning to Stewart, B.C. we will enjoy a delightful dinner at the famous Bitter Creek Café before settling into the cozy lounge of our seaside lodge for a talk by Dr. Bristol Foster on the need for parks, eco reserves and protected areas.



- Overnight: Ripley Creek Inn, Stewart, B.C.

Day Six

Study Focus: glaciers and coastal estuaries – how both influence salmon runs

- Right after breakfast, everyone sets off for Fish Creek and another opportunity to witness the drama of life in a salmon river. Grizzlies, black bears, bald eagles, wolves, otter, mink, beaver, gulls, mergansers and other wildlife frequently make appearances here.



- From Fish Creek we drive north to Salmon Glacier, the 5th largest ice field in Canada and the largest glacier accessible by road in the world. Views of this massive river of ice from the mountainside drive are spectacular and everyone will be able to see for themselves classical features of glacial geology, from lateral, medial and terminal moraines to nunataks and crevasses.

- A hike to the base of the glacier for a picnic lunch amongst alpine wildflowers, and the possibility of sighting barren ground grizzlies, will be a highlight of the day. Examples of rapid glacial retreat and plant colonization are unmistakable here.



- Returning by mini vans back to sea level, there will be time to investigate the rich coastal estuary at the head of Portland Canal, the long fiord that separates British Columbia from Alaska. An elevated cedar walkway allows close investigation of the Stewart estuary without having to tromp through the mud, and it is here Esther Lev from Oregon will speak on the crucial role these ecosystems play in salmon production.



- A seafood dinner will mark the end of a perfect day
- Overnight: Ripley Creek Inn, Stewart, B.C.

Day Seven

Study Focus: how glacial dams and lava flows influence salmon distribution, salmon fish wheel techniques and Nisgaa native culture

- Leaving Portland Canal after breakfast, we drive back through the Coast Range, stopping at beautiful Stewart Lake for a refreshing swim.



- Continuing south, we enter Nisgaa territory and the site of the most recent volcanic eruption in Canada. Lava flowing through the Nass Valley here in the 1700's completely buried three Nisgaa villages and dammed salmon rivers, resulting in landlocked salmon that have evolved quite differently from their migratory kin.

- We enjoy a traditional Nisga'a lunch in the home of a distinguished Elder at Gitwansilk, a Nisga'a village on the edge of the Nass River that miraculously survived the lava flow. There's a suspension bridge here we can cross to observe a native fish wheel in operation.
- Continuing on to the Nisga'a village of Gincolith, we pass spectacular scenery as we return to the coast and our village home stay for two nights.



- A welcome feast in the community longhouse, and speeches by local chiefs will make us feel very much a part of this small community that has only had a road to the outside world for a few years now.
- Overnight: Gincolith B&B home stays

Day Eight

Study Focus: salmon and their marine environment predators, and a community fish hatchery



- Right after breakfast we set off to sea to observe gill-netters and other boats used in the Nisga'a commercial fishery. We will likely see huge coastal brown bears along shore as this region borders the Kutzematine, the only sanctuary in the world specifically set aside for grizzlies. Seals, sea lions, bald eagles, orcas and other salmon predators can also be observed here.
- While at sea, everyone with a marine fish license can try their hand salmon fishing, jigging for cod, snapper, halibut and pulling Dungeness crab traps to contribute seafood for our dinner this night. Gincolith is famous for its rich marine resources and no one knows how to prepare it more deliciously than the locals.



- Late in the afternoon we will have an opportunity to see a native fish hatchery in operation and try our hand luring a salmon from the beautiful Gincolith River - (fresh water license required).
- A campfire on the beach after dinner will provide the perfect setting for Dr. Bristol Foster's talk on the nature deficit in society, which must be rectified if civilization is to endure. Following this presentation, we will hear First Nation legends that teach children respect for salmon and all living things.
- Overnight: Gincolith B&Bs

Day Nine

Study Focus: the role of lakes in sockeye salmon production, temperate rainforest ecology and a National Historic Site salmon cannery

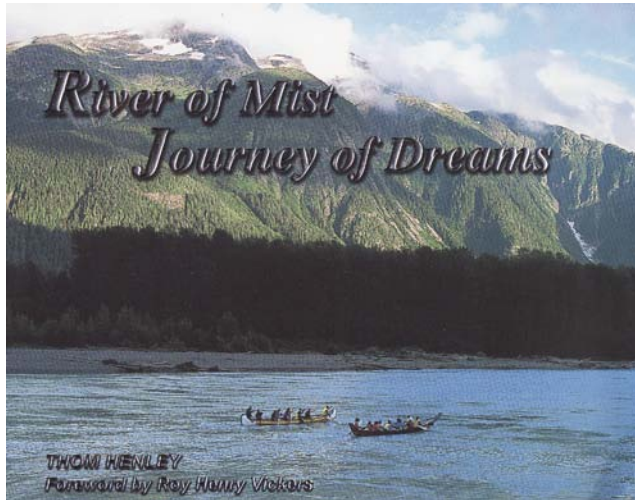


- Right after breakfast we set off by mini vans back to the Skeena River. During the 2-hour drive we will have opportunities to view several large lakes that figure prominently in sockeye salmon production.
- We will also see Lava Lake, created when a lava dam blocked a Nass River tributary. The role glacier dams and lava dams played in British Columbia's fish distribution will be discussed here.
- After a delicious lunch in Terrace, we will have a lecture by Dr. Allen Gottensfeld, Gitksan Fisheries biologist, who will address sockeye salmon concerns
- Continuing our drive down the lower Skeena (a route that has received a 5-star rating in the Michelin Guide as one of the most scenic in North America) we will stop to explore a coastal rainforest with massive cedars, spruce and hemlock trees. Dr. Reimchen's earlier lectures on Nitrogen-15 transfer from salmon to trees will take on new meaning here as we explore an old growth "salmon forest".
- In a quiet forest setting, Dr. Bristol Foster will conduct an informal talk on the differences between a temperate rainforest and a tropical one.



- Reaching the Pacific coast for our third time, we will visit North Pacific Cannery, the oldest salmon cannery north of the Columbia River.
- North Pacific is a National Historic Site that offers a rare glimpse into salmon canning in its hey-day. All of the equipment is still operational here and theatrical performances by the staff help bring the era back to life.
- To really get a taste of life in the canning era we will overnight in the historic houses of the Japanese net bosses, perched out over Invernese Channel, the northern most arm of the Skeena River where it reaches the sea.

- After a delicious dinner we will have a talk by Thom Henley, author of the book “River of Mist, Journey of Dreams”. Thom’s talk will document the history of the Skeena with archival images and discuss the vital role this region played during both World Wars.



- Overnight: North Pacific Cannery

Day Ten

Study focus: Tsimshian culture & salmon fishing techniques, commercial fishing & value added products



- Just a short drive from the cannery is the coastal city of Prince Rupert where we will enjoy breakfast and then check in to our charming hotel beside the wharf.
- A short stroll from our hotel is the superb Museum of Northern British Columbia where we will learn even more about the fascinating natural and First

Nation history of the region with a tour by the curator or her very knowledgeable staff.

- Lunch will be on your own today during a free afternoon with a wide range of things to do determine by personal preference and one's pocket book. Some may choose to go sport fishing for halibut, salmon and cod, and return home with their catch. Others may prefer kayaking between the islands fronting Prince Rupert Harbor or take a whale-watching excursion into Chatham Strait to look for humpback whales.



- A short flight or speedboat trip north leads to the Khutzematine, the world's only sanctuary set aside for grizzly bears. The Tsimshian First Nation offer a fascinating tour

to their ancestral village sites where pre-historic petroglyphs can be found in the tidal zone and longhouse pits and beams are being reclaimed by the rainforest.

- Those short on cash, or tired of travel, can simple relax at our lodge and explore Cow Bay, a historic district filled with quaint shops, seafood restaurants and lively pubs.
- After dinner, Bob Fraumeni – commercial fisherman and owner of Finest-at-Sea-Seafoods – will give a fascinating talk on commercial salmon fishing and adding value to product.



- A closing ceremony will mark our final night together.
- Overnight: Eagle Bluff B&B, Prince Rupert

Day 11

- After a great breakfast at our wharf side B&B we will arrange transport connections for onward travel. Air, train, ferries and bus service to all points service Prince Rupert. Those wishing to extend their adventure can take an incredible train trip across the Rockies to Jasper or board a ferry north to Alaska, south to Port Hardy or west to Haida Gwaii.

