

Tracking Raincoast into 2004





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Dear Friend of Raincoast,

As each year passes and technology races onward, it is hard not to be awed by the “miracles” of science. Tools such as microsatellite fingerprinting, stable isotopic analysis and Geographic Information Systems have revolutionized conservation biology. They help us understand how wolf families are related, give us insight into the diet of bears, and allow us to predict high-quality habitat for wildlife.

As powerful as these tools may be, they are but one step in informing the decisions that would see a salmon stream protected or a rainforest left standing. In the end, it is people that make these decisions – people with entirely unique views on science, politics, economics, ethics and culture – and it is people who are at the very heart of conservation initiatives.

This is the basis of Raincoast’s approach to conservation. It involves a convergence of science and values known as *applied conservation*. The *conservation* successes we’ve had are the result of combining and *applying* the core values of contemporary knowledge with the needs and traditions of coastal peoples. It is by using this integrated approach – founded in solid, rigorous science – that lasting and meaningful conservation can evolve on the coast. But no matter what the science says, in order for something to last, people must believe in it.

Nowhere has this approach come into sharper focus than in the Koeve River Valley, thirty nautical miles south of Bella Bella in Fitz Hugh Sound. Two years ago a private land parcel at the mouth of the Koeve was purchased and title transferred to the Heiltsuk First Nation, for whom the Koeve is a sacred site. Since then, the valley has become a core of a spiritual and cultural revival. It has also become an excellent model for conservation on the coast.

During the summers, children attend Science and Culture Camps in the Koeve. They spend weeks living in forest cabins, harvesting food from the land and relearning the stories and traditions that make them Heiltsuk.

Coupled with programs offered by ethnobotanists, entomologists, ornithologists and ecologists, the children are encouraged to view



Jessel Housty – Y’agis – performing the Nan grizzly bear dance at Koeve.

Cover photo: Raincoast’s research vessel Achiever sits out storm force south-east winds in Fiordlands.

We have our challenges ahead of us...but it is places like the Koeye that remind us that success is possible – a success that people from many backgrounds and points of view can share in.



If you are interested in visiting the Koeye watershed, accommodation is available at the lodge. For more information, contact www.koeyelodge.com

ancestral land-use practices in modern terms as well. They begin to see the Koeye not only as a good model for life, but as a good model for conservation. The Koeye grizzlies have benefitted as well from Heiltsuk stewardship. We documented more bears in the lower valley this past year than in any other over the last decade.

For Larry Jorgenson, the director of these camps, the message is clear. “Why do people look at conservation and First Nations people as if they’re not the same thing?” he asks. “The kids running on the beach are the same thing as the grizzly bears walking in the estuary. There’s nothing mystical about it. It’s not some political ploy. It’s just a fact. This is what we want people to appreciate.”

The cultural momentum building in the Koeye translates directly into immense political strength and solidarity when it comes to protecting the area now and into the future. This kind of power could not have arisen without Raincoast (among others) and the Heiltsuk working together to discover how our values converge.

We have our challenges ahead of us and sometimes they seem too numerous to count. But it is places like the Koeye that remind us that success is possible – a success that people from many backgrounds and points of view can share in – and we hope to take what we’ve learned at Koeye to other places throughout the Great Bear Rainforest.

Inside you’ll find the full year’s update on our research and campaigns, including a more in-depth look at our Marine Operations Program. A huge thank-you goes out to all of you (too many to name here!) for the extraordinary support and generosity that makes our work possible. Your past gifts, future donations and countless volunteer hours are supporting an unwavering commitment to this globally unique region. Working together, we will continue to make conservation gains that will put us in good stead with future generations.

Warmest holiday wishes,

A handwritten signature in blue ink that reads "Misty MacDuffee". The signature is written in a cursive, flowing style.

Misty MacDuffee
Chair of the Board

Rainforest Wolf Project 2003



Biologist Chris Darimont inspects a headless chum salmon recently caught by a wolf. Coastal wolves are eating a surprisingly large amount of marine based foods, including salmon, seals, sea lions, barnacles and clams.

ARE WOLVES ON THE COAST GENETICALLY UNIQUE? How does hunting by humans affect genetic diversity? On which resources do wolves depend, and how does logging affect this predator-prey system? The Rainforest Wolf Project is the first study of coastal mainland wolves, answering evolutionary, ecological and conservation-oriented questions such as these.

Project researchers had a busy winter starting with the release of a deer winter range study, which mapped the overlap of critical winter habitat for deer with areas targeted for logging. The report is proving to be an important information layer in First Nations and other land use planning. A paper on the fishing behavior of wolves was published in the *Canadian Journal of Zoology*, and a conservation assessment about the effects of logging on wolf-deer systems was published in the *Canadian Field-Naturalist*. Our work in the Great Bear Rainforest was also presented at several conferences, including at the Society for Conservation Biology Conference in Minnesota and at the International World Wolf Congress in Banff.

Our fourth field season was very productive. In all, over 1000 new scat and hair samples were collected, and new discoveries of wolf rendezvous sites were made. This will add to an already extensive data set. Initial genetic analysis suggests that the Great Bear Rainforest is a haven of genetic diversity for wolves. Geneticists have identified more haplotypes (i.e. variant of genetic marker) in the GBR than in any other location where wolves still exist. This diversity is likely the result of the freedom from persecution these wolves have enjoyed relative to wolves elsewhere.

Dr. Paul Paquet searching for satellite signals in a fall storm.





PHOTO: JEREMY BOOTH

Wolf killed on Porcher Island. In British Columbia, there is no seasonal limit for trappers or guide-outfitters who kill wolves, nor is there a special permit required for residential hunters.

CanadianWolves.net highlights wolf issues across Canada

Seven conservation groups, including Raincoast, have joined together to promote conservation of Canada's wolves through a new website.

Canadianwolves.net calls attention to a plan by the BC government to kill predators that are considered a threat to the endangered Vancouver Island marmot. The Ministry of Water, Land and Air Protection has stated that they will resume the predator cull this winter; it calls for a total removal of wolves and cougars within 400 square kilometer buffers surrounding marmot colonies. However, by the government's own admission, the decline of marmot populations is largely due to the fact that their habitat has been subject to clearcut logging. Raincoast and other conservation groups have been working to have the plan scrapped, and we continue to demand that the government implement non-lethal means of keeping predators away from marmots.

Canadianwolves.net also highlights wolf policy issues in Alberta, Ontario, and Quebec, where wildlife management takes a significant toll on wolf populations.

People can support these efforts by going to www.canadianwolves.net and taking action.

This season, we welcomed Erin Navid and Patti Swan, both graduate students from the University of Calgary, to the project. Erin will complete genetic analysis that will identify individual wolves, allowing us to make estimates of population, home range use and wolf movement among islands. Patti is using Geographic Information Systems (GIS) to model habitat suitability for wolves and deer, as well as participating in work to predict the long-term residency of wolves on islands. Early efforts are showing that the presence and abundance of salmon are the best predictors of wolf occupancy, even more than size and isolation of islands. We continue to be astounded by how salmon shapes life in the Great Bear Rainforest. ■



PHOTO: CHRIS DARIMONT

Above: Heiltsuk wolf researcher Chester Starr, also known as Lone Wolf, searches for the Fish Trap pack north of Bella Bella.

Below: Winter wolf range map. Protecting deer winter range from industrial logging is a critical element to conserving wolves over the long term.



Cameraman Jeff Hogan of National Geographic Television filming wolves and other Great Bear Rainforest wildlife for PBS. Stay tuned in 2004.



From obscurity to renown: *Rainwolves*

A Rainshadow Media Production.
Executive Producers:
Andrew Koster, Ian McAllister.
Director: Twyla Roscovich

In August 2003, *Rainwolves* was aired on Discovery Canada. This is the first feature documentary to chronicle rainforest wolves. The film follows the Rainforest Wolf Research Project by following biologist Chris Darimont and Heiltsuk wolf researcher Chester Starr as they sail up BC's rugged coastline on a mission to conduct ecological and behavioural research. With stunning footage of wolves fishing for salmon, digging for clams, and swimming from island to island in search of deer, *Rainwolves* offers a compelling look at the Rainforest Wolf Project as well as identifies threats facing coastal wolves and their habitat. Watch for future showings on Discovery Canada.

Speaking for Wolves of the Northern Rockies

Absent of any legitimate scientific rationale and at the behest of the sport hunting lobby, the BC government has been sterilizing wolves in Muskwa-Kechika Park. This is part of a hunter-funded experiment to increase ungulates in the Turnagain River valley – a move designed to generate more big-game animals for sport hunters. Controlling wolf populations by killing or sterilizing individuals is neither an effective measure in decreasing numbers over the long term nor a socially acceptable practice in today's world. Please email, write or call Joyce Murray, Minister of Water, Land and Air Protection to voice your opposition to this regressive policy:
joyce.murray. mla@leg.bc.ca
Fax: 250-387-1356
Phone: 250-387-1187
Legislative Assembly, PO Box 9047
Stn Prov Gov, Victoria, BC V8W 9E2

New research vessel a great “Achievement” for Raincoast



Captain Brian Falconer, at the helm of Achiever, will be overseeing the logistics, maintenance and operations of Raincoast’s marine programs.

AFTER MORE THAN A DECADE of dreaming and a year of searching, Raincoast has commissioned the first full-time, non-government funded research vessel in the Great Bear Rainforest. The 63-foot sloop-rigged Achiever will be a tremendous asset to our Marine Operations Program, directed by Captain Brian Falconer. “Our field needs are only increasing, and with Achiever, we will now be able to provide safe, quality accommodation and transport for researchers working in the remote areas of the coast,” says Brian, who has owned and operated research and charter vessels on the BC coast for more than 20 years. “The Achiever will be a key tool to further primary research in addition to developing an internship program for youth to develop skills in the areas of eco-tourism, scientific research and marine professions.”

Achiever already hard at work

The inaugural voyage in mid-August transported Rainforest Wolf Project researchers and a National Geographic Television crew from the Alaskan panhandle to Bella Bella. Preliminary work on a future grizzly study was also part of this expedition. Achiever then headed to Namu to further efforts for protection in this region. BBC and Canadian Geographic, both of whom are producing films about the Great Bear Rainforest, also utilized the boat through the fall. The season finished with researchers from Raincoast and the Heiltsuk Fisheries Program starting the field work for our three-year Wild Salmon Project. In November, Achiever began the long journey back to Vancouver Island where she will overwinter.

Future projects for Achiever

We are already preparing Achiever for next year’s expeditions:

- Wild Salmon Program fieldwork
- Rainforest Wolf Project fieldwork
- Whale and dolphin line transect surveys on the entire BC coast
- Youth Internship Program
- Working with media to raise awareness of the Great Bear Rainforest
- Providing other non-government groups with safe and reliable marine support for their own initiatives in the Great Bear Rainforest ■

The sailing vessel Achiever, having spent much of her life in the Bering Sea, will now be a common sight in the remote inland fiords and offshore waters of British Columbia.

We would like to recognize the extraordinary generosity of so many people who saw the importance of this step for Raincoast. Most notably, we would like to thank Bill Fuller, John Huguenard, Jean Miller, Paul Paquet, Richard and Lisa Prehn, Anita Rocamora, Sandy and Savvy Sanders, and Charlene Wendt.

Thanks also to the Herculean efforts of Stephen Anstee and Heidi Krajewski who helped prepare Achiever for her first busy field season.

Special thanks to Bill Falk of Western Marine and Brad Schmidt of International Paints for their donations of supplies.

While the purchase of Achiever was a huge step for Raincoast, it also marks the beginning of another challenge. Providing for her maintenance, upgrades and operation will require effort and money. Additionally, we need funding to carry out the community outreach projects we have planned for Achiever. In order to help meet these needs, we are looking for donations of equipment (see our wish list on Page 18) and funding commitments for specific programs. Please contact us for more information on how you can help.

Achiever facts and figures

Achiever was designed by respected Kiwi designer Bo Birdsall and built in 1991 in Whakatane, New Zealand for the charter trade. She was certified for operation as a passenger vessel by the New Zealand coast guard in offshore waters and was used for four years in the Bering Sea before coming to BC.

Hull construction	Displacement
Corten steel	28 tons (25.4 tonnes)
Length overall	Rig cutter
63 ft (19.2m.)	Power 6cyl, 130 hp. Ford Dover diesel
Beam 14.5 ft. (4.5 m.)	Accommodation 11
Draught 6 ft. (1.83 m.)	



“Shoot grizzlies with cameras, not guns.”



Coastal grizzly bears are among the slowest reproducing mammals in North America, yet they continue to be killed for “sport” despite widespread public opposition and compelling evidence of hunting overkill.

A NEW RESEARCH REPORT, *Crossroads: Economics, Policy and the Future of Grizzly Bears in British Columbia*, produced by the Centre for Integral Economics for Raincoast, is the first study of revenues from businesses benefitting from BC’s grizzly bears. The researchers found that grizzly viewing is conservatively worth \$6.1 million (CDN) annually in BC – almost twice the value of the grizzly hunt.

Report findings include:

- A four-percent annual growth rate over 20 years in grizzly viewing ecotourism could make up the entire revenue shortfall from a complete moratorium on grizzly bear hunting.
- The ongoing grizzly hunt could have a negative impact on the overall economic activity related to grizzly bears by reducing the number of bears.
- The cost of effectively monitoring the grizzly population to ensure its integrity would be far more expensive than the economic benefits of the hunt.

Inspired by findings in the report, ecotourism businesses have formed the Commercial Bear Viewing Association of British Columbia (CBVA). “Killing grizzlies eliminates future profit by reducing the bear population – but a photographed bear can be shot again and again and again,” says Dean Wyatt, Director with the CBVA and owner of Knight Inlet Lodge on BC’s central coast. “As a business operator on the coast, I want to see this government stand behind their economic promises. Supporting ecotourism in this province means balancing jobs and the environment, not killing bears and the economy.” ■



The Grizzlygate Scandal



The Grizzlygate Cover-up

What is Gordon Campbell's Liberal government trying to hide?

SINCE 2000 the Raincoast Conservation Society has been fighting to access the province's grizzly kill location data (exactly where and how many grizzly bears are killed by trophy hunters) in order to conduct a scientific analysis of BC's grizzly population and the impacts of trophy hunting. BC's Information and Privacy Commissioner and the Supreme Court of BC have ruled that this data should be made

public, but the Liberal government refuses to comply.

During the last election Premier Campbell promised that his government would be the most open and accountable in Canada. Yet, the Liberals continue to go to extraordinary lengths to suppress information that is critical to grizzly bear conservation.

What is this government trying so desperately to hide?

Let Premier Campbell know how you feel.
Take action at www.raincoast.org.

PLEASE DONATE to our campaign to protect BC's grizzly bears.



www.raincoast.org
Raincoast Conservation Society
Box 8663, Victoria, BC V8W 3S2

SINCE 2000, the Raincoast Conservation Society has been fighting to gain access to the province's grizzly kill location data (where and how many grizzlies are killed by trophy hunters). It is our intention to conduct an independent scientific analysis of BC's grizzly population and the impacts of trophy hunting. BC's Information and Privacy

Commissioner and the Supreme Court of BC have ruled that this data should be made public, but the Liberal government refuses to comply.

The Liberals' so-called independent "grizzly bear scientific panel" refused to include an analysis of the data in their review of the province's grizzly bear management. This casts serious doubt on both the credibility and utility of the panel's final report. In addition, the Liberals are supporting the Guide Outfitters Association of BC in their attempt to get the Appeal Court of BC to overturn the Supreme Court's 2002 ruling supporting the release of grizzly kill location data to Raincoast. One can't help but wonder what this government is so desperate to hide? ■



Raincoast bear researcher Callum McAllister looking for the elusive Spirit bear.

Wild salmon forever

WITHOUT A DOUBT, WILD SALMON ARE THE LIFEBLOOD of British Columbia's Great Bear Rainforest. Over 140 wildlife species depend on salmon, and the annual pulse of marine nutrients derived from spawned-out salmon fuels coastal ecosystems and sustains biodiversity. When salmon decline, so do the creatures that depend on them. Unfortunately, salmon runs have declined in many systems in the Great Bear Rainforest. In 2002, Raincoast released *Ghost Runs*, a report that highlighted this alarming trend.

To understand the decline in salmon populations, we first have to know which streams actually support salmon. This seems like a simple quest, but right now, we simply do not know. This fall, Raincoast and Heiltsuk Fisheries Co-Management surveyed 67 streams for salmon presence; all of these were previously undocumented as salmon streams. Of these 67 streams, six were discovered to be salmon-bearing. This pilot study, which covered only a tiny percentage of the Great Bear Rainforest, suggests that there may be hundreds more salmon runs than previously thought. Taken individually, most of these undocumented runs are not large, but their ecological contribution across the region could be enormous. Not only do these small, unknown runs suffer when subjected to commercial fisheries targeting larger populations, but the lack of knowledge of the status of streams can also lead to them being unwittingly destroyed by industrial activities such as logging. Our aim over the next two years is





Biologist Misty MacDuffee checking salmon fry traps in the Ecstall River. A key priority for Raincoast in 2004 will be to document unknown salmon-supporting systems and work for their protection.


PHOTO: CHRISCHEADLE.COM

simple: to identify and document the unknown salmon-producing streams in the Great Bear Rainforest.

Another underexplored aspect of this issue is the genetic diversity in salmon runs of the Great Bear Rainforest. Because salmon tend to spawn only in the stream where they were born, they can become genetically adapted to thrive in the unique conditions of their home stream. Taken together, all these different runs of salmon make up an invaluable reservoir of genetic diversity that can be drawn upon when climate change or disease hits. Using a non-invasive sampling method to collect salmon tissue, our genetic research will enable us to map out unique runs of salmon.

The routes that young salmon take when migrating to sea are yet another mystery. Studying these routes will help us understand human impacts on these traveling fish. For example, how does the spread of disease and sea lice from open net cage fish farms affect migrating wild salmon? As part of the Wild Salmon Program, we will be mapping areas that are critical rearing and migration corridors for young salmon.

These three Wild Salmon Program initiatives – stream surveys, genetic analysis and migration mapping – will not only teach us about the ecology and evolution of salmon on the coast, but they will also provide a solid scientific foundation for a more enlightened conservation approach to managing these vital populations. ■



*Environmental wins may be temporary,
but the losses are permanent.*

Canadian ecologist Dr. Bristol Foster

Forestry update

In 2002, over 100,000 truckloads of logs – a record 3.7 million cubic meters – were shipped overseas. If these logs had stayed in BC for manufacturing they could have translated into 3,700 jobs.



THE CURRENT BC GOVERNMENT has become the most anti-environmental government in the province's history, and they have done it with shocking speed. Their exploits range from supporting logging and mining in parks, to record raw log exports, to rolling back the Forest Practices Code, and to privatizing public land for logging and mining. One of the biggest threats to the Great Bear Rainforest is the Working Forest Initiative, as it gives all-encompassing power to the government over public land while ignoring the needs of local communities and the fundamental rights of First Nations. Please see www.BCfacts.org for a detailed account of the BC Liberals' environmental record.

Without question, 2004 will be a critical time in the Great Bear Rainforest. The central and north coast Land and Resource Management Plans will be concluding, as will many coastal First Nations Land Use Plans. It remains to be seen whether the BC government will choose environmental protection over industrial destruction. Raincoast is working around the clock to ensure that these plans are based on the best available information on wolves, bears, salmon and rare forest types. ■



Above: Donaldson Lake, Banks Island, 2003. The government's idea of sustainable forest management is to set aside a handful of trees in the middle of a clearcut and call it a "Special Management Zone".

Right: Business as usual at Donaldson Lake, Banks Island, 2003. Chris Genovali looks over a sea of stumps in a salmon-producing system that was provided no buffers to the streams draining through this clearcut.



The Spirit Bear Conservancy, under the leadership of the Gitga'at and Kitasoo-Xaixais Nations, continues to make progress. A protected areas strategy for this spectacular part of the Great Bear Rainforest is expected next year. However, uncertainty over the future of two of the most stunning watersheds on the central coast – the Carter and the Green – remains. Let's hope 2004 sees a way to shift these two watersheds into permanent protection.



Namu



IN 2002, THE HEILTSUK NATION invited Raincoast and Ecotrust Canada to assist in acquiring 80 hectares of private land at the mouth of the Namu River and to further assist in developing a long-term vision for the surrounding region. Namu is an important watershed that supports runs of sockeye, coho, pink, and chum salmon, three species of trout, plus grizzly bears, wolves and cougars. The low elevation cedar forests of Namu with its numerous culturally modified trees are testimony to thousands of years of First Nations use and occupation.

The long-term vision for Namu remains to be fully developed, but a revitalization plan for the old cannery site is in the works. Stay tuned for more progress on Namu in 2004. ■



Raincoast's video Canada's Great Bear Rainforest took first place in the Forest Category at the California-based EarthVision 2003 Environmental Film and Video Festival Competition!

Ocean Falls hatchery still a threat

LAST YEAR WE REPORTED that the Norwegian multinational Pan Fish (Omega Salmon Group in Canada) was building North America's largest fish farm hatchery in Ocean Falls, despite opposition from the Heiltsuk First Nation and the objections of conservationists, fishermen and tourism operators. The Heiltsuk claim aboriginal rights to 33,700 square kilometres of land and water in BC, an area that includes the Ocean Falls site, and they filed suit against the province and Omega for failure to consult on the \$15 million hatchery.

In August 2003, the BC Supreme Court ruled that Omega did not infringe on the aboriginal rights of the Heiltsuk First Nation. The hatchery at Ocean Falls, which can supply up to 10 million Atlantic salmon smolts per cycle, is intended to fuel widespread expansion of fish farms throughout the Great Bear Rainforest. Omega is seeking to operate 18 farm sites in the Prince Rupert region alone.

The court retained jurisdiction over the consultation process and did not rule out future stop-action against Omega if they failed to continue efforts to consult and negotiate with the Heiltsuk, or if they damage the environment in any way. If you would like to support the Heiltsuk in exploring their legal and political options, please contact Theresa for further information (theresa@raincoast.org). ■

International Day of Action against Pan Fish a success

In January 2003, commercial and sport fishermen, tourism operators and four separate First Nations from California to Alaska travelled to Ocean Falls to peacefully protest the construction of a 10 million smolt capacity Atlantic Salmon hatchery. Protest images from this remote region made their way to newspapers and television screens across North America. www.farmedanddangerous.org

Arthur Island. One of three open net cage fish farms north of Cape Caution operated by Marine Harvest and the Kitasoo-Xaixais First Nation.



Organically certified farmed salmon for BC?

SEVERAL COMPANIES, INCLUDING PAN FISH, are pushing for organic standards for farmed salmon in BC. Organics is the world's fastest-growing food sector, while aquaculture is the world's fastest-growing food producer. While "organic" brings to mind healthy products that are good for the environment, these are not terms associated with open net cage farmed salmon. Raincoast is closely monitoring the proposed organic standards process and is actively working to oppose the certification of open net cage-produced fish. ■

From open net to closed-containment

UNLIKE LAND-BASED AGRICULTURE, salmon farms are immersed in a fluid environment. Disease originating from the farms can travel miles on the tide in a single day. Viruses, bacteria and sea lice can live for weeks and even months in the feces and contaminated water from the farms.

Closed-containment systems are a way of separating the farm from the wild environment. There are two kinds of closed-tank systems: land-based systems, and floating tanks that mimic open net pens. The systems are not perfect but significantly reduce the most serious risks to wild salmon.

In order to address various environmental and human health concerns, companies must be required to utilize closed-containment systems that fully separate the farmed environment from the wild. They must also follow stringent standards that ensure the food is safe to eat.

Raincoast Conservation Society has been researching alternatives to open net cage salmon farming since 2001. We are dedicated to working with innovative companies to develop closed-containment systems that will sustain both wild salmon ecosystems and coastal communities. ■



PHOTO: CHRISHEADLE.COM

Raincoast is part of the **Coastal Alliance for Aquaculture Reform (CAAR)**, a BC-based coalition of First Nations, fishermen and conservation groups working to protect wild salmon, coastal ecosystems, coastal communities and human health from destructive fish farming practices. CAAR believes farmed salmon will be safe only when the industry:

- Uses technology that eliminates fish escapes and disease transfer
- Guarantees waste is not released into the ocean
- Labels their fish as "farmed" so consumers can make informed choices
- Develops fish feed that doesn't deplete global fish stocks
- Ensures wildlife is not harmed as a result of fish farming
- Prohibits use of genetically modified organisms
- Eliminates the use of antibiotics and pesticides in fish farming
- Ensures contaminants in farmed fish don't exceed safe levels
- Stops locating fish farms in areas opposed by aboriginal groups or other communities



Sea lice research underway

This study is at the forefront of research in addressing concerns surrounding salmon lice and juvenile salmon.

ILLUSTRATION: ALEXANDRA MORTON

IN 2001 AND 2002, BIOLOGIST ALEXANDRA MORTON recorded high densities of the parasitic salmon louse on migrating juvenile salmon in the Broughton Archipelago. This region, adjacent to Northern Vancouver Island, boasts the highest density of salmon farms along the west coast of North America.

Salmon lice are a common parasite on adult salmon. However, there is rising concern about the effects of high salmon lice densities on the more vulnerable juvenile salmon. Given the existing lack of research, the risk posed by salmon farms to wild salmon is alarming, given that high salmon lice densities have been documented near salmon farms. The risk is greatest when tiny smolts pass by fish farms that are infected with elevated levels of salmon lice.

In BC, the only part of the coast left without significant numbers of fish farms is the Great Bear Rainforest. As fish farmers begin to look at these pristine areas as potential sites, we are fighting against time to collect the baseline information on levels of sea lice on wild salmon. There are already dozens of fish farms planned for the central and northern Great Bear Rainforest's marine environment.

Graduate students Corey Peet and Marty Krkosek are studying sea lice in partnership with Raincoast, Heiltsuk Fisheries, the Universities of Victoria and Alberta and Environment Canada. Corey's study will determine the susceptibility of different species of young salmon to salmon louse, as well as the lethal load of lice for juvenile salmon. Marty is studying disease transfer of sea lice from farms to juvenile salmon and the impact on salmon mortality. ■



We regretfully mark the passing of

Joyce Fuller, Amie Huguenard, Timothy Treadwell, John McInnis and Joel Timberlake. All were long-time supporters of Raincoast and our work to conserve habitat for all wildlife.

Raincoast to launch whale and dolphin surveys

WHILE BC'S KILLER WHALES receive much public attention, our coastal waters support a variety of cetaceans that we know very little about. More than 20 species of whales, porpoises and dolphins live, travel and feed in BC waters.

Currently, the provincial government is lobbying to lift the moratorium on offshore oil and gas development. Seismic surveys that accompany oil exploration produce high-intensity noise. These sound waves have the potential to impact cetacean species in BC waters.

In 2004, Raincoast will begin surveys to acquire basic inventories on the abundance and distribution of these animals. This data will be critical in assessing the impacts associated with oil exploration, and it will also build a base for future studies that examine diet, habitat use and conservation of these animals. ■

Offshore oil and gas on the BC coast? Nine million hectares of BC coastal waters have been leased to oil and gas companies. The BC government, despite the absence of an environmental assessment, has committed to lift the 30-year moratorium on seismic testing and drilling placing our marine life at great risk.



PHOTO: ALEXANDRA MORTON

Raincoast supports contaminant research

In partnership with the Institute of Ocean Sciences, Raincoast hired UVic biology co-op student Nuri Nolla in 2003. Nuri's work is part of a long-term project to examine the effects of toxic chemicals on marine mammal health.

Images of the Raincoast

Ian's beautiful images of the Great Bear Rainforest reached people far and wide in 2003 – from our limited edition framed prints from our Raincoast Gallery, to our sophisticated new online catalogue of digital photographs. (Thanks to Johanna Gordon-Walker and volunteer extraordinaire Gord Harris.)

Raincoast also has wildlife gift cards, videos, T-shirts and signed copies of The Great Bear Rainforest book. Please contact our Victoria office at greatbear@raincoast.org, or 250-655-1229, or visit the Gallery online at www.raincoast.org/gallery.



More ways to support Raincoast

Here is what we need for 2004

(We would appreciate donated items in good working order)

For our Marine Operations

Program: 14-foot inflatable boats (2), 8-person life raft, 12 personal flotation devices, PC laptop computers (2), marine charts (old or new), hand held VHF radios, 2500-watt inverter, mig welder, hurricane furnace, 16-19' aluminum run-about boat, 75-115 HP 4-stroke outboard engine, 5-10 HP outboard, small motor boat, light-weight 12-15' canoe and paddles, first aid kits.

There are many other needs not listed here. If you have tools, equipment, or marine supplies that you think we could use, please contact us.

Research Equipment: hand-held GPS units, small, medium and large lifejackets, digital camera, altimeter, sleeping bags, tent, small motor bike, waterproof binoculars and spotting scope.

Office: compact VCR and TV for mobile Raincoast education display, colour photocopier with 10 trays and collating capabilities, shelves and filing cabinets, laptop computer (Mac), easels, conference table and chairs, display tent, sturdy bookcases for office machines, and a disco ball!

Services: Legal advice, carpentry services, boat maintenance, technical support.

If you are interested in volunteer opportunities with Raincoast, please contact our Victoria office at 250-655-1229 or email greatbear@raincoast.org.

New ways to give

Monthly giving program

We depend on individual supporters like yourself for the consistent support we need to carry out Raincoast's important research and public education work. The steady, regular nature of monthly giving allows us to plan ahead and respond to environmental issues as they emerge.

Monthly donations can be set up using our online giving service at www.raincoast.org/support, or by calling our office at 250-655-1229.

Gifts of securities

Changes to tax regulations make donations of publicly traded securities a smart way to support charitable organizations. Publicly traded securities include stocks, bonds, mutual funds, bills, and futures traded on stock exchanges in Canada and other countries.

You can reduce your capital gains tax in half when you give securities to a registered charity. If you are considering a gift to Raincoast and have a choice between giving cash or securities, donating securities will bring you greater tax-savings.

Donations of securities are beneficial to Raincoast because:

- They can be sold and put to immediate use in our research and public education work

Donations of securities are beneficial to you because:

- You receive a tax receipt for the fair market value of the securities. Fair market value is calculated based on the closing price of the shares on the day the donation is made.
- You will pay tax on only 33.5% of the gain when you give your securities to a charity. If you sell the securities yourself, you will pay tax on 66.67% of the gain. The tax credit you receive for the donation will offset the tax you must pay on the gain.

For more information on this giving option, please contact Robin at robin@raincoast.org or 250-655-1229.

Raincoast needs a home

Raincoast is looking for the donation of a house in Victoria that would serve as an office and store-front space, meeting spot and accommodation for our interns and others from out of town. We are a tax-exempt charity and can give a tax credit if owner is interested. Please contact Chris Genovali for more information, chris@raincoast.org, 250-655-1229.



Raincoast membership makes a difference

We need your support to continue our important work. Raincoast has a strong presence in the Great Bear Rainforest, and we play a key role in the conservation efforts on the BC coast and Pacific Rim.

Yes! I would like to join Raincoast and help protect the Great Bear Rainforest

- ☐ I would like to renew my membership and continue supporting Raincoast in 2004*
- ☐ I am a first-time member
- ☐ I would like to send a gift membership (*the recipient will receive a gift card from Raincoast*)

* Please note: members that have not renewed their membership in two years will be removed from our mailing list.

Enclosed is my contribution of:

- ☐ \$30 ☐ \$50 ☐ \$100 ☐ \$250 ☐ \$500 ☐ Other _____
- ☐ I would like to make a monthly contribution of \$_____ (Please include a VOID cheque or call us to set up this convenient way of giving through your VISA or MasterCard)
- ☐ Please send me a charitable tax receipt

Your Name

Mailing address

CountryPostal code

Email address Phone number (optional)

Gift Recipient Name

Mailing address

CountryPostal code

Email address Phone number (optional)

Total enclosed: \$

Cheques can be made out to "Raincoast" and sent to: PO Box 8663, Victoria, BC V8W 3S2

Please contact us if you have moved Email: greatbear@raincoast.org

Phone: 250-655-1229 Fax:250-655-1339

Other Gift Ideas

- ☐ *The Great Bear Rainforest*, by Ian and Karen McAllister and Cameron Young, is a powerful way to introduce family and friends to this area of global renown. \$40
- ☐ *A Grizzly Sport, Rainforest Wolves, Islands of the Spirit Bear* and *Rainforest Giants* are now available on one video. \$20
- ☐ *Canada's Great Bear Rainforest*, winner of the EarthVision 2003 Environmental Film and Video Festival, is just \$20
- ☐ Organic cotton Raincoast T-shirts (made by Patagonia) are available in long and short sleeve. Size and colour availability will vary — please inquire before ordering. Short sleeve: \$15 Long sleeve: \$20

Our online catalogue of limited edition prints from the Raincoast Gallery are available in various sizes and stages of finishing. We also have wildlife cards and small matted prints for sale. www.raincoast.org/gallery

Donate online!

www.raincoast.org/support
Use your VISA or MasterCard to make a one-time gift or set up membership and monthly donations.

Raincoast staff

Chris Genovali
Executive Director

Ian McAllister
Conservation Director

Chris Darimont
Rainforest Wolf Project Biologist

Brian Falconer
Marine Operations Program Coordinator

Johanna Gordon-Walker
Wolf Researcher/Field Office Assistant

Robin Husband
Office Administrator

Michelle Larstone
Development Director

Misty MacDuffee
Salmon Researcher

Karen McAllister
Outreach Coordinator

John Nelson
Wild Salmon Program Coordinator

Corey Peet
Salmon Researcher

Theresa Rothenbush
Aquaculture Specialist

Kira Thomson
Membership Coordinator

Rob Williams
Research Scientist

Field Support: Clare Aries, Randy Carpenter, Phil Clement, Brendan Connors, Nathan deBruyn, Trina De Moyné, Howard Duncan, Vilaiwan Fernandes, Burl Gladstone, Tom Hunt, Mike Jacobs, Kate Lansley, Jean Marc Leguerrier, Nikki McClure, Maggy Mittler, Erin Navid, Gudrun Pflueger, Ryan Popowich, Mike Reid, Andrew Rippington, Ray Ronconi, Jay Scott, Charlie Seaford, Patti Swan, Chester Starr, Troy Whitford, Chris Williamson, Jack Wilson, Steve Wilson, Billy Wolf, Nancy Woodman.

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♻️ Printed on New Leaf Reincarnation Matte paper which is 100% recycled (50% post-consumer waste), processed chlorine free. Using this paper has resulted in the following measurable environmental savings: 4 trees, 205 pounds of solid waste, 937 gallons of water, 3 million BTUs of energy, 317 pounds of greenhouse gases, 277 miles travelled in the average American car, 1 pound of air emissions, 8 pounds of hazardous effluent. (*Eco-audit supplied by New Leaf*)

Welcome to: **Robin Husband** joined us in December 2002 as our Office Administrator and has quickly become integral to the smooth running of our organization. Robin has a background in office and financial management and a deep passion for the environmental issues that Raincoast is involved in. **John Nelson** came on board in July 2003 as our Wild Salmon Program Coordinator. John has a PhD in Molecular Biology from the University of Wisconsin-Madison. He is an Adjunct Assistant Professor at the University of Victoria teaching conservation biology and molecular evolution, and conducts research on biogeography and molecular population genetics in various species. John was previously a Conservation Geneticist with Fisheries and Oceans Canada, and sits on the Committee on the Status of Endangered Wildlife. **Rob Williams** will be joining us in January to begin whale and dolphin surveys on the coast of BC. Rob holds a PhD in biology from the Sea Mammal Research Unit at the University of St. Andrews. He has carried out numerous research and education programs to assess and mitigate impact of whale-watching traffic on resident killer whales, and has conducted surveys to model distribution and abundance of minke, humpback, and fin whales in the Antarctic. **Brian Falconer** joined our staff in 2003 as the Marine Operations Program Coordinator. Brian's lifetime of experience leading natural history adventures aboard the schooner Maple Leaf and teaching sea and life training skills to youth are a huge asset to Raincoast. We could not wish for a more capable and competent captain to direct our marine initiatives and oversee the operation of a vessel fully dedicated to our coastal mission.

We would like to welcome **Mike Heffring** and **Jim Allan** to the Foundation Board of Directors. Mike operates the social research group Environics West based in Calgary, Alberta, and was a board member of the Calgary Foundation for many years. Jim is a pilot, teacher, mountaineer and entrepreneur. He is the founder and president of Weatherhaven, a company that designs portable shelters and complementary systems for installations on remote projects around the world.

Special thanks to all of you that volunteered or offered in-kind services in 2003:

Clare Aries, Jim and Jean Allen, Shelley Alexander, Alouette-Verlag Publishing, Stephen Anstee, Erin Ash, Katrina Assonitis, Robert and Birgit Bateman, Katrina Bennett, Craig Benson, Susan Berta, Jake Boyd, Sandy Briggs, Heather Bryan, Rosemary Bryan, Helen and Warren Buck, Larry Campbell, Ed Carmack, Sam Catron, Chris Cheadle, Bridgette Clarkston, Phil Clement, Brendan Connors, Baden Cross, Paul Darimont, Nathan deBruyn, Trina De Moyné, Benoit Denis, George Dockray, Ecotrust Aviation, Courtney Edeburn, Blair Estenson, Fairfield Bicycle Shop, Vilaiwan Fernandes, Bristol Foster, Bernard Gaudet, Elise Gilchrist, Sue Greetham, Gulf Islands Brewery, Terri Hague, Phoenix Hammel, Jeff Hansen, Gord Harris, Maureen and Mike Heffring, Gary Housty Sr., John Huguenard, Harvey Humchitt, Amelia Humphries, Frances Hunter, Rick Husband, Harold Javete, Larry Jorgenson, Ron and Liz Keeshan, Heidi Krajewsky, King Pacific Lodge, Kerry Kinnersley, Knight Inlet Lodge, Christine and Andrew Kotaska, Kate Lansley, Jean Marc Leguerrier, Clive Lonsdale, Emily Lorence, Dave and Stacy Lutz, Maple Leaf Adventures, Derek Martin, Deb Martyn, Jane McAllister, Victoria McAllister, Ben and Maëve McAllister (Bella Bella Dock Crew!), Nikki McClure, Gitte McCormick, Wayne McCrory, Allan D. McDonnell, Faisal Moola, Peter Meyer, Maggy Mittler, Monk Office Supplies (Sidney outlet), Morris Frames and Gallery, Alex Morton, Hans and Mira Munich, Song Horng Neo, Erin Navid, Steve Neill, Kevin Nolan, Erin Nyhan, Thora O'Grady, Ocean Adventures, Ocean Light II Adventures, Danny Oliver, One Northwest, Paul Paquet, Patagonia, Inc., Planet Explorer Group, Doug and Andrea Peacock, Bradley Pearlman, Cynthia Pena, Briony Penn, Bill Perrett, Dave Person, Gail Peterson, Gudrun Pflueger, Gina Pickton, Rich and Liisa Prehn, Mike Price, Charlotte Priest, Des Raynor, Tom Reimchen, Richard Ring, Andrew Rippington, Andreas Ritchler, Stacy Roberts, Anita Rocamora, Peter Ross, Andrew Sakamoto, Sandy and Savvy Sanders, Bruce Sandison, Helen Schwantje, Jay Scott, Charlie Seaford, Shoal Harbour Inn, Jill Sivers, Mark Spencer, Patti Swan, Simon Thomson, Training Resources for the Environmental Community, Ted Turner, Nancy Woodman, Niki Verzuh, Bill Vogel, John Volpe, Mary Vickers, Leo Wang, Charlene Wendt, Andrew Westoll, Ron Westlake, Andrei Whitaker, Rob Williams, Chris Williamson, Mike Wilson, Neville Winchester, Billy Wolf, Cameron Young.





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