

Tracking
Raincoast
into 2016



RAINCOAST
CONSERVATION FOUNDATION



Raincoast is a team of conservationists and scientists empowered by our research to secure protection for the lands, waters, and wildlife of coastal British Columbia. We use rigorous, peer-reviewed science and community engagement to further our conservation objectives. We call this approach *informed advocacy* and it is unique among conservation efforts.

Our vision for coastal British Columbia is to secure protection for the habitats and resources of umbrella species. We believe this approach will help safeguard all species and ecological processes that exist at different scales. Central to our efforts are long-term relationships with Indigenous governments that are rapidly regaining agency over conservation decisions.

Investigate. Inform. Inspire.

We investigate to understand coastal species and processes.

We inform by bringing science to decision makers and communities.

We inspire action to protect wildlife, their habitats and resources.

Twenty years following the inception of the Raincoast Conservation Foundation, we are pausing to contemplate what we have accomplished and how we are moving forward. Those highly accomplished Raincoasters who were our students twenty years ago are now mentoring students of their own; those who began with Raincoast as undergraduates are now PhD scientists. Visionary and knowledgeable, these “descendants” are now guiding Raincoast’s evolving efforts regarding the scientific research that advances wildlife conservation.

Traditional wildlife conservation aims to ensure that species survive, and that ecological and evolutionary processes continue. Most conservation scientists and wildlife managers argue the overarching purpose of conserving species justifies sacrificing individual animals for the greater good of populations. Proponents claim this view is rooted firmly in objective science, and differing views are misplaced because they are non-scientific.

These proponents contend that science and the law afford managers, researchers, and conservationists the right to ignore the welfare of individual animals. If, however, it is morally wrong to cause animals to suffer, then sacrificing animals for research or management produces serious moral problems. We need to consider whether dogma is trumping scientific evidence and ethics to the detriment of wildlife. If so, are outdated preconceptions causing unnecessary divisions between conservation and animal welfare?

Trophy hunting, which we define as gratuitous killing rather than for food or subsistence, figures prominently in wildlife management. Heralded as a management “tool” for conserving bears, wolves, and cougars, most proponents believe trophy hunting is justified as long as hunts are numerically sustainable, and because large carnivores consume species, (e.g., moose) that hunters want to kill. We see this model of wildlife management as non-scientific and argue that trophy hunting is inconsistent with contemporary societal values, which increasingly respect the welfare of individuals within wild animal populations.

Raincoast’s view is that neither science nor ethics support the idea that individuals and their welfare should be sacrificed for management, research, and conservation. We believe there are important connections between animal welfare and conservation - as well as between individuals and populations - that are not widely understood or acknowledged. We conclude that embracing these linkages leads to sound ethical science, and ultimately a more effective framework for managing and conserving wildlife.

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20 Years of Raincoast Achievements

In just twenty years, Raincoast has earned an international reputation as an outstanding science-based conservation organization that makes a measurable difference in the lives of wildlife in coastal BC and beyond.

Through hard work, partnerships, and the backing of our supporters, Raincoast's achievements are significant in magnitude and number: more than a hundred peer-reviewed scientific papers, prestigious awards, national and international media coverage, policy changes at local to global levels, documentary films, and success holding governments accountable in the courts. Most importantly, this translates into protection for species. Our anniversary year is a fitting time to highlight some accomplishments.

Raincoast's conservation work is notable for its foundation in rigorous science and animal welfare ethics. This includes several study "firsts" such as: the first DNA and ecological studies of BC wolves (finding that coastal wolves are genetically distinct); BC's first coast-wide systematic surveys of marine mammal and birds; the first analysis of contaminants in grizzly bears; and an economic study which concluded that "hunting" grizzly bears with cameras was more profitable than with guns. After publishing many peer-reviewed papers, Raincoast scholars had an academic highlight in 2015, a publication on "Human Superpredators" in the prestigious journal *Science*.

Raincoast's conservation work gained early recognition on the national stage when *Time* magazine listed efforts to save the Great Bear Rainforest from logging as their "Best Environmental News of 1999". Shortly after, the *Globe and Mail* named Raincoast one of Canada's "Top Ten Charities".

In reflecting on twenty years of such coverage, the consistent headliner has been our efforts to stop the grizzly hunt. In 2005, Raincoast pioneered the purchase of commercial hunting tenures as a pro-active, economic, and enduring solution not subject to the whims of changing governments. Since then, we have safeguarded the lives of bears and wolves from commercial trophy hunters in more than 27,000 km² of the Great Bear Rainforest.

As part of our "inform" mandate, we have facilitated the production of a dozen documentaries including Discovery Channel's *Rainwolves*, National Geographic's *Last Stand of the Great Bear*, Patagonia's *Groundswell*, and most recently, *Directly Affected*; the last two addressing tar sands pipeline expansion and oil tankers on Canada's West Coast. We have also worked with CBC, BBC, and NHK on natural history television series.

Then there are our "artistic" endeavours. The Art for an Oil-Free Coast expedition in the summer of 2012 - in partnership with more than fifty celebrated BC artists and coastal eco-tour operators - embraced the language of paintbrushes and carving tools to give a voice to our fragile coast. Sixty original pieces of art toured BC and Alberta accompanied by our now best-selling book *Canada's Raincoast at Risk: Art for an Oil-Free Coast* and the documentary film *Reflections*.

But none of our successes would be possible without our partners.

With our partners at Ecojustice, we have used the courts to affirm laws and stand up for species. A five-year legal battle with the Government of British Columbia, which required two court decisions and a court order, forced the government to reveal locations of grizzly bear kills - a coup that allowed us to expose the province's risky grizzly management to the world. Raincoast secured (and has upheld despite appeals by the province) a European


Union importation ban on BC grizzly bear trophy parts in twenty-eight countries. Similarly, we won in the Supreme Court and the Court of Appeal to affirm the federal government's legal obligation to protect Canada's endangered killer whales, including their salmon food source.

As intervenors in federal review hearings, Raincoast has critically examined the implications of energy and shipping proposals on coastal species. After four years as intervenors and expert witnesses in the Enbridge Northern Gateway review process, we filed a lawsuit against the federal government for its erroneous approval of the project. Similarly, as intervenors in Kinder Morgan's proposed Trans Mountain Pipeline review we submitted more than five hundred pages of evidence explaining the implications to wild salmon, Southern Resident killer whales, and herring. We are also intervenors in the proposed expansion of the Robert's Bank shipping terminal, as this project too, has serious implications for salmon habitat and killer whales.

With an important partner, the Hakai Institute, Raincoast launched the Applied Conservation Science Laboratory at the University of Victoria. Now entering its fourth year, the lab supports outstanding conservation-based research defined by its high-calibre scholarship and dedicated community engagement. Partnering with leadership from four Indigenous territories, we study grizzly, black, and "Spirit" bear diets and movements over 22,000 km². This work supports Indigenous governments' efforts to safeguard these culturally, ecologically, and economically important species. Complementing and informing this work is research into the global impacts of trophy hunting and commercial fisheries.

We look forward to the next 20 years.

Marine Conservation



We stand on guard for BC's remarkable coast by opposing its conversion to a hydrocarbon corridor for fossil fuel transport.

Guardians of an oil-free coast

In the summer of 2014, the Northern Gateway Project – a proposal to construct a tar sands oil pipeline from Alberta to Kitimat, BC and then ship that oil via tanker through some of the world's most treacherous and pristine waters – was given approval by the Canadian federal government. By the fall of 2014, Raincoast, Living Oceans Society, Forest Ethics, and eight First Nations, all of which were intervenors in the project's federal hearing process, launched eighteen lawsuits in response to the decision.

Raincoast's component of the consolidated lawsuit, argued by our legal team at Ecojustice, focused on the failure of the National Energy Board (NEB) to protect threatened and endangered species (specifically humpback whales and mountain caribou) in accordance with Canada's Species at Risk Act. The case was heard in the Federal Court of Appeal in October 2015. We invest in these legal cases to slow and halt otherwise unfettered development.

Kinder Morgan's pipeline and oil tankers threaten the Salish Sea

Another pipeline proposal to transport tar sands oil to the BC coast threatens the Fraser River and the Salish Sea. Kinder Morgan wants to triple the capacity of oil delivered from Alberta to Vancouver, and then export this oil via tanker through the Salish Sea. Raincoast and Living Oceans are again partnered intervenors represented by Ecojustice in the NEB process. Raincoast submitted more than five hundred pages of critique and evidence primarily on the potential impacts to Southern Resident killer whales and the threats to Fraser River salmon. The consequences for killer whales alone – even in the absence of an oil spill – is reason enough for the project to be shelved.

Roberts Bank: Shipping Expansion–

a threat to killer whales, salmon and the Fraser estuary.

We are confronting yet another project, which threatens the Fraser River and the Salish Sea. Raincoast is an intervenor in the federal review process for Port Metro Vancouver's Terminal 2 project, which would see the development of a new three-berth container terminal located next to the existing coal and shipping terminals at Robert's Bank in Delta, BC.


The proposed construction lies on the delta of the Fraser River, one of the most important estuaries on the Pacific coast.

The project footprint will destroy vital rearing and foraging grounds for salmon and birds, and the increased shipping will severely compromise the critical habitat of Southern Resident killer whales. Raincoast will undertake analysis and provide critiques regarding the ways this proposal would undermine wildlife and degrade marine health in an increasingly stressed Salish Sea.

Our Threatened Coast

Motivated by the increasing pressure on BC's South Coast, Raincoast's upcoming report, to be released in early 2016, highlights what is threatened in the Salish Sea. From killer whales to surfers, salmon to eelgrass, the Salish Sea provides vital benefits for both humans and wildlife alike.





Salish Sea Spill Map Project

Raincoast's Salish Sea Spill Map Project is a simple yet effective way for the public to understand how floating substances, like oil, might move around our oceans. Drift cards (four-by-six-inch pieces of numbered yellow wood) are dropped into the water in various locations, float around with the winds, currents, and tides, then are recovered by beach-walkers and reported to our website, salishseaspillmap.org. This information allows us to track where cards travelled and how long it took them to get there.

While highlighting the threat of oil spills from bitumen-laden tankers, or bunker fuel oil spills

from cargo ships at anchor, this effort also illustrates the connectivity of our oceans. Our deployments last year of four thousand drift cards in the Fraser River, Burrard Inlet, and at points along the shipping route from Vancouver, led to another six hundred drift card recoveries in the Salish Sea and beyond.


Behind the scenes, analysis is underway. We have started mapping areas where cards accumulate and can compare it to oil spill modeling undertaken for pipeline and oil tanker proposals. Meanwhile, we have engaged the public in citizen science, catalyzing important discussions within communities at risk.

ALASKA

BRITISH
COLUMBIA

The Astonishing Voyage of Salish Sea Drift Cards

Four drift cards launched in the Salish Sea have made a remarkable voyage all the way to Alaska. Although the likelihood of oil from a spill in the Salish Sea reaching Alaska is remote, these recoveries serve as an important reminder of the interconnected nature of our oceans, and a good demonstration of just how far reaching point-source pollution can be. As we complete our analysis of the drops to date and work towards publication, we will partner with oceanographers using high-tech drifters to investigate other aspects of ocean circulation.



**More drift cards will be deployed
in 2016, so keep your eyes open for
cards landing on a beach near you.**

Marine Mammals

The greatest threat to BC's marine mammals is human activity. Our daily actions affect their ocean habitat and food supply. Pollution, underwater noise, ship strikes, entanglements, fish availability, and oil spills are all issues we can change.

Southern Resident killer whales struggle to find enough salmon to eat in a noisy and polluted ocean. Their primary food, Chinook (spring) salmon, is managed for commercial and recreational fishing, not for hungry whales. Important seasonal feeding grounds are also international shipping lanes and vessel noise from ships and boats can interfere with the ability of whales to hunt, catch salmon, and communicate. As the Salish Sea becomes more industrialized with traffic and ports for oil, coal, gas, and container ships, killer whale survival will become more difficult.

To assess this problem and find solutions, Raincoast teamed up with leading scientists studying killer whales, acoustic disturbance, and endangered wildlife to conduct an analysis of killer whale population viability. This powerful type of analysis can examine risks to wildlife populations over time and evaluate the likely effectiveness of recovery options.

Our study showed that reduced Chinook salmon consumption has the largest effect on depressing the Southern Residents' population size, possibly leading to extinction in one hundred years. Reduced food consumption can occur from

decreased salmon availability (through fishing, oil spills, and/or climate change), and by inhibiting the whales' ability to locate and catch fish, typically a result of noise disturbance from vessels. Our study concluded that the Southern Residents cannot withstand any additional pressures from increased shipping traffic in the Salish Sea.

However, the population viability analysis also had encouraging news. If the Salish Sea were quieter, less polluted, and had more Chinook salmon, killer whale numbers could slowly build (up to 1.9% annually with 20% more salmon consumption) and the population could survive at larger and more viable numbers into the future.

Raincoast wants to make killer whale recovery a reality. We need regulations that dictate quiet boats and ships near whales; restrict the numbers and routes of vessels travelling through critical habitat; address fisheries that adversely affect the age, size, and abundance of Chinook salmon; remediate polluted waters; and prevent further contamination from new pollutants.

Raincoast collaborates with the WHaLE project on Canada's Pacific Coast

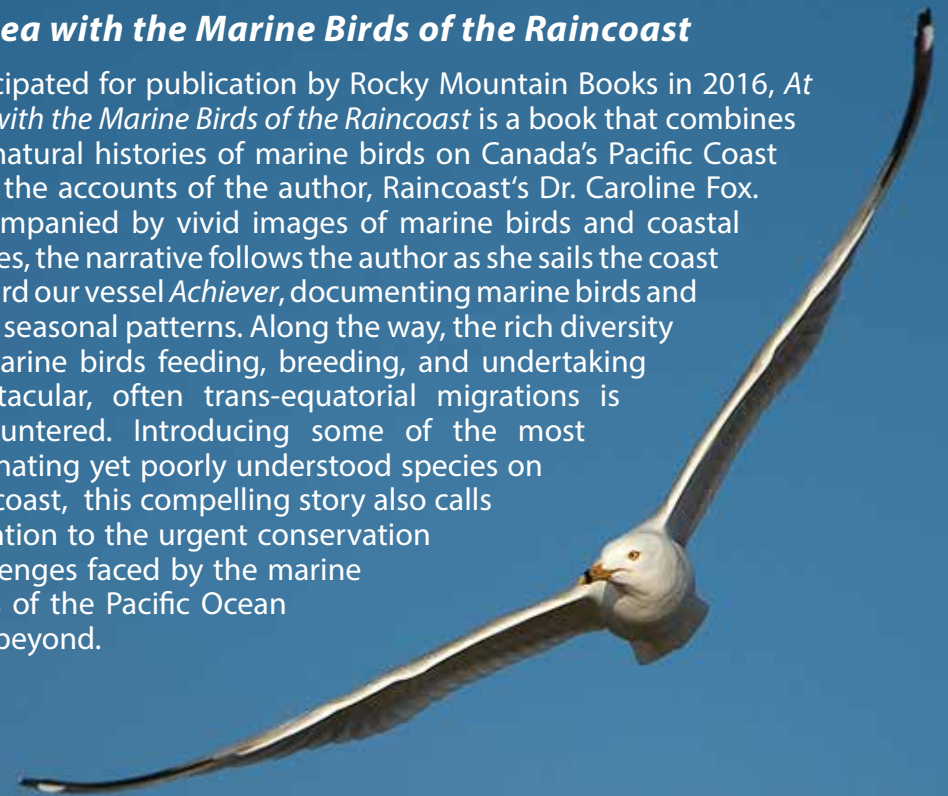
Industrialization of the world's oceans is intensifying. Activities like shipping pose a substantial threat to whales via ship strikes and noise. In response, the *Whales, Habitat and Listening Experiment* (WHaLE) was launched on Canada's Atlantic and Pacific coasts by researchers from Dalhousie University and the University of Victoria, along with collaborating partners including Raincoast.

WHaLE seeks to address outstanding knowledge gaps and mitigate vessel risks to whales using innovative ocean glider and acoustic technologies. Joining WHaLE is incoming Killam Trust Postdoctoral Fellow and Raincoast scientist Dr. Caroline Fox, with advice and support from Raincoast's Dr. Paul Paquet.



At Sea with the Marine Birds of the Raincoast

Anticipated for publication by Rocky Mountain Books in 2016, *At Sea with the Marine Birds of the Raincoast* is a book that combines the natural histories of marine birds on Canada's Pacific Coast with the accounts of the author, Raincoast's Dr. Caroline Fox. Accompanied by vivid images of marine birds and coastal scenes, the narrative follows the author as she sails the coast aboard our vessel *Achiever*, documenting marine birds and their seasonal patterns. Along the way, the rich diversity of marine birds feeding, breeding, and undertaking spectacular, often trans-equatorial migrations is encountered. Introducing some of the most fascinating yet poorly understood species on this coast, this compelling story also calls attention to the urgent conservation challenges faced by the marine birds of the Pacific Ocean and beyond.





Wild Salmon

Managing salmon as if wildlife matters: the sustainability of a fishery should be assessed by the health of the wildlife that depend on the same fish.

Many coastal species rely on annual returns of Pacific salmon, however, the needs of these animals and ecosystems are not considered in conventional fisheries management. Raincoast works to protect salmon for the coastal species and processes which rely on their abundance.



Check out shop.raincoast.org to purchase our new salmon poster.



Patagonia Provisions: A leader in sustainability

Patagonia is an environmental and ethical leader in the outdoor clothing industry, choosing sustainability and innovation over profit as its priority.



Patagonia Provisions has applied Patagonia's sustainability expertise and environmental ideals to a new arena – conscientiously-sourced food items. Wild salmon are one of a handful of products they have chosen to source, and it's not an easy task. Substantial improvements to the sustainability of salmon fishing are needed, as not enough salmon reach their spawning grounds. Raincoast and our partners are working with Patagonia Provisions to identify fisheries with catches, methods, and practices that do not take a critical food supply that bears, whales, and other wildlife need to thrive.

Salmon and the Fraser Estuary

The Fraser River Estuary is one of the Pacific Coast's most important estuaries. Its delta provides vital migratory, rearing, and feeding habitat for fish, birds, and marine mammals. It is the rearing ground for Canada's largest run of wild salmon – species who play a crucial role in a foodweb that links fish, birds, and marine mammals across thousands of kilometers of the Pacific Ocean. As part of our efforts to understand, mitigate, and reduce habitat impacts from industrial proposals, Raincoast is working with academic partners to characterize the use of the estuary by different species of wild salmon at different times and places.

A Vision for Lower Fraser Salmon

Dozens of streamkeeper groups, First Nations, and conservation groups have been working diligently to protect Fraser River salmon. Despite their efforts, they cannot stem the damage caused by the dismantling of agencies that had a mandate to mitigate Fraser River habitat destruction or respond to the aggressive nature of Port Metro Vancouver's expansion plans.

Our engagement with these groups reveals a desire for a broad vision that captures the importance of the lower Fraser River and estuary for its local and global significance. In 2016, we aim to help residents and communities create such a vision. We want salmon to remain a foundation species in the lower Fraser for generations to come and seek to ensure land use, policies, and decision making that reflect their vital importance.



Salmon Carnivore Project

Raincoast's salmon-carnivore project, now celebrating its seventh year, is jointly directed with a coalition of partners from the Heiltsuk, Kitasoo/Xai'xais, Nuxalk, and Wuikinuxv Nations. The project is gaining long-term, large-scale knowledge of bear populations, their movements, habitat, and relationship with salmon.



Each year, field crews in these communities monitor hundreds of sites across a 22,000 km² area of BC's coast. This season, we began a pilot project with the Gitga'at Nation and are working towards a longer-term study. Sub-projects are guided by each Nation and designed to answer their specific questions, while contributing to broader research and policy.

Monitoring sites unobtrusively snag tufts of hair as bears walk by, yielding thousands of hair samples that provide information on bear identity, species, sex, diet, and hormones. By combining data from hair with information from remote cameras, mapping, and local and traditional ecological knowledge, we are able to answer fascinating questions that inform conservation.

What habitat is critical for bears?

For years, partnering First Nations have pointed out shortcomings in the province's use of satellite photos to select "high quality" bear habitat. This approach has identified some small, unconnected habitat patches but has generally failed to identify important areas for bears. With our partners, we have identified key corridors used for travel, allowing individual bears to move, important habitats to connect, and genetic diversity to (likely) be maintained. This work – being interjected into government-to-government land-use negotiations – provides a clearer picture of wildlife needs, enabling more informed management, and contributing to the broader goals of Raincoast and our partners.

How do bears move in relation to salmon?

Grizzly and black bears can roam hundreds of square kilometres. On the BC coast, a main motivator for bear movement is access to salmon. As salmon spawn at different times and abundances, their availability is not consistent. Bears respond by tracking salmon across the landscape, relying on different runs at different times and locations. Using hair samples and spatial models, our team is assessing how bears' diets vary across areas and years. This helps us protect their habitat requirements over the long term.

How do salmon affect interactions among bears?

Competition between grizzly and black bears over ever-dwindling salmon runs has conservation implications. Research has shown that competition might affect the rare "Spirit" bear. Together with the Spirit Bear Research Foundation, our team has documented range expansion by grizzly bears onto islands previously occupied only by black (and Spirit) bears. By combining data on bear densities with techniques for identifying the genetic basis for coat colour, we can assess how salmon management affects bear interactions, with the aim of safeguarding the future of the Spirit bear.





Raincoast's Applied Conservation Science Lab



Science Inspired by Nature, People, and Place.

Our Lab at the University of Victoria, supported by partners at the Hakai Institute, is uniquely dedicated to applied conservation research, community engagement, and affecting positive change. We train bright, energetic, and engaged conservation scholars who not only solve some of our time's most complex conservation problems, but also capitalize on opportunities to create a better future for nature, people, and place. As a signal of our academic performance, we maintain a first rate publication record. We research applied topics ranging from carnivore ecology to animal welfare to trophy hunting. But we consider scholarship only part of our work, as we correspondingly strive to affect change.



How human **SUPERPREDATORS** can become more sustainable

Our most recent publication and informed advocacy efforts went “viral”. Reporting in the world’s most prestigious scientific journal, *Science*, our team revealed new detail, illustrated above, about how modern humans – primarily via industrial fisheries and trophy hunting – have emerged as the planet’s “super predator”.

Our main message: natural predators (i.e., wildlife), which have survived the test of time as sustainable predators, can provide guidance to humanity. Despite claims by fisheries and wildlife managers, truly sustainable predators do not target the largest individuals in prey populations, harvest fifty percent of populations, or commonly kill carnivores, as humans do. Reaching many millions through the media, we offered new ideas, ignited new conversations, and added urgency for implementation of solutions.

sustainable tourism

at Canada's Premier Grizzly Bear
viewing destination



TRAVELERS'
CHOICE
2015

Photo: Shea Wyatt

Knight Inlet Lodge believes in environmentally responsible, sustainable tourism and is proud to support Raincoast in their efforts to bring an end to the trophy hunting of bears in British Columbia. It is through the efforts of dedicated organizations such as Raincoast that we will one day celebrate an end to this barbaric activity.

As the original grizzly bear viewing lodge in British Columbia, 2016 will mark our 20th season, Knight Inlet Lodge has been in the forefront of this growing tourism sector. It is our belief that Raincoast's ongoing purchases of hunting territories is a key part in the movement to "stop the hunt".

1-250-337-1953 info@grizzlytours.com

www.grizzlytours.com

www.facebook.com/knightinlet



Large Carnivore Conservation

At Raincoast, we encourage a "wildlife welfare" ethic. We believe the suffering that humans cause to wildlife by limiting their food availability or by direct persecution via trophy hunting and lethal control is our collective responsibility.

Co-existing with Carnivores

The Coexisting with Carnivores Alliance (CwCA) is an emerging group dedicated to reducing human conflict with carnivores. The alliance strives to demonstrate best practices, increase public safety, and ultimately reduce wildlife mortality. The group is comprised of conservation non-profits, independent biologists, First Nations, and local, provincial, and federal parks and wildlife agencies. Raincoast was among the founding members, providing CwCA with capacity to develop education, further outreach, and manage data, based on our experience working with carnivores elsewhere on BC's coast.

During research in Wuikinuxv territory, a remote wildlife camera program was implemented that engages local youth to check the footage, enter the data, and inform community members about wildlife in the area. These efforts support the Wuikinuxv leadership in reducing conflict with wildlife. By sharing this model with CwCA, additional camera programs have been inspired and implemented with youth and school groups in T'Souke Nation communities, as well as in Tofino, and Ucluelet.



Stopping the trophy hunt

"Look for our renewed guide outfitter buyout campaign in 2016 — and consider investing in a more peaceful future for wildlife."



Every year in BC a staggering number of bears, wolves, and other large carnivores are killed by hunters for trophies on their walls and floors. For twenty years, Raincoast has worked to end this senseless slaughter. In 2005, we began purchasing commercial hunting tenures and by 2012, had halted commercial trophy hunting in more than 27,000 km² of the coast, an area three times the size of Yellowstone National Park. These purchases have enabled a renewed presence of grizzlies and other large carnivores, which in turn, has significantly enhanced wildlife viewing activity for coastal eco-tourism operators.

Over the past few years our ultimate goal – to acquire all of the remaining commercial hunting tenures in the Great Bear Rainforest – had been at a standstill due to provincial policy. However, the barriers obstructing our ability to purchase additional hunting territories have been recently removed. Now, we stand poised to complete our vision.



Maple Leaf Adventures and our guests have been pleased to support Raincoast since its founding in the 1990s. Our shared ethics of exploring, educating and conserving make a great partnership.

For a luxurious way to explore the BC and Alaska coast with expert naturalists, we invite you to view our itineraries in:

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Stopping the war on wolves

Throughout BC, wolves are poisoned, trapped, sterilized, and machine-gunned from low-flying aircraft in the name of protecting domestic livestock under the guise of wildlife management. Wolves have been increasingly and erroneously blamed for the decline of prey populations, such as caribou. In reality, habitat loss from industrial and recreational activities is the ultimate reason for caribou decline.



In response to the unjustified wolf cull launched by the BC government, Raincoast initiated a billboard campaign, shown above, to raise public awareness about this ill-conceived policy. Our first billboard went up outside of Victoria. Owing to an outpouring of "conservation investments" from donors, we then installed billboards outside Vancouver, on major BC ferry routes, and bus shelters. We will continue raising awareness and opposition to the BC government's wolf cull and their latest plan to kill wolves and pups in their dens. We will inspire action that brings an end to this persecution.

Speaking out for wolf welfare

In a last-ditch effort to halt the decline of a woodland caribou herd in Alberta, a gruesome wolf cull "study" was undertaken using aerial shooting and strychnine baits to kill wolves, even though strychnine use has been stopped in the rest of Canada and contravenes the Canadian Council of Animal Welfare Guidelines.

In response, Raincoast scientists Dr. Paul Paquet and Dr. Chris Darimont joined others in co-authoring the journal commentary "Maintaining Ethical Standards during Conservation Crisis". It denounced the failure of researchers, government agencies, research institutions, and the scientific publishing process to abide by ethical standards of animal research and welfare.

Paquet and Darimont also published a comment in the journal *Environmental Conservation*, detailing why the use of strychnine to kill wolves is biologically and ethically unacceptable. Death by strychnine ingestion is inhumane; causing a myriad of horrendous symptoms before a slow and painful death finally occurs. Worse still, these baits are non-selective and can affect other animals (e.g., wolverines, fishers, and foxes) to the point where entire populations have decreased.

Our science and outreach is key to stopping this cruel institutionalized practice perpetuated by governments and researchers. Our message was heard loud and clear: strychnine use to poison wildlife should be prohibited and condemned by the scientific community, governments, and conservation groups.



Achiever's 10 year refit Anniversary

Her story begins with a few short words in *Tracking Raincoast into 2003*: "We're looking for a research vessel." By 2004, we had found

and acquired *Achiever* - a passenger sailboat built in New Zealand by Kiwi designer Bo Birdsall. *Achiever* spent her formative years sailing the south Pacific and the Bering Sea before arriving in British Columbia.

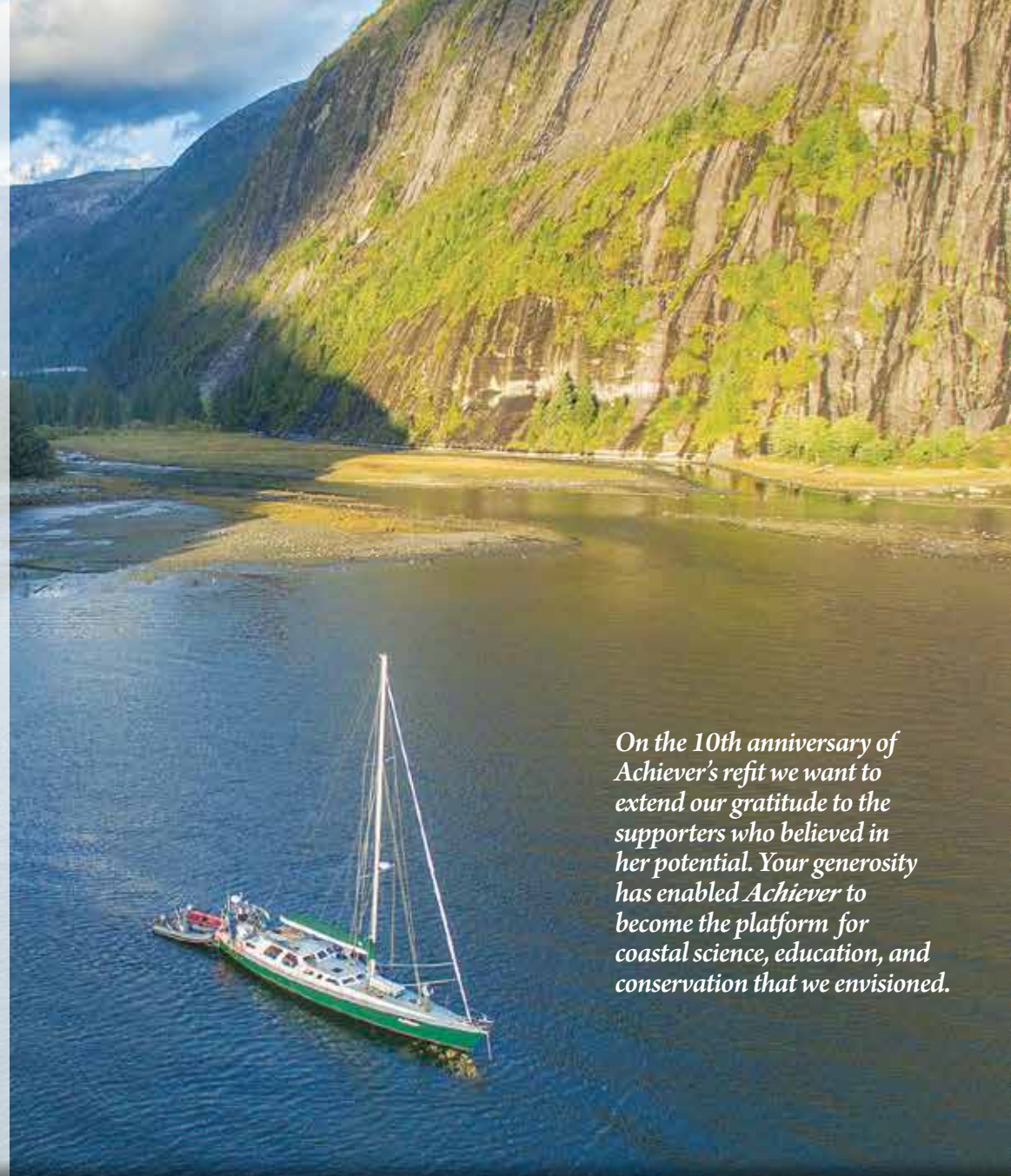
It was in a Vancouver marina where Raincoast's Brian Falconer and Misty MacDuffee first laid eyes upon her. With her formidable twenty-meter steel hull, it was clear she had the robustness and potential to be the open-water scientific research vessel Raincoast sought. And there was karma; *Achiever* was owned by one of our European partners who helped us secure the ban on importing BC grizzly hunt trophies to the EU.

This coming year marks ten years of service since *Achiever's* extensive refit, which was completed thanks to the donations, labour, and assistance of

generous supporters who understood the potential of this vessel. Led by Brian Falconer, Raincoast's Marine Operations director, her refit included a new steel cabin, power house, and a substantial redesign to make her better suited to the grueling requirements of open water survey work and extended access to the remote and otherwise inaccessible regions of the Great Bear Rainforest.

Since *Achiever's* re-launch in 2006, she has traveled more than a hundred thousand kilometers, logging many of these hours on transect surveys for marine mammals and birds. For a decade now, she and her dedicated crew have spent seven months out of each year working at sea, partnering with communities, universities, government agencies, and NGOs conducting scientific field work and ecological monitoring, creating film documentaries, hosting educational programs, and monitoring our guide outfitting territories.

Her success is a testament to the vision, dedication, and hard work of the crew that transformed her, and continue to operate her today.



On the 10th anniversary of Achiever's refit we want to extend our gratitude to the supporters who believed in her potential. Your generosity has enabled Achiever to become the platform for coastal science, education, and conservation that we envisioned.



*Achiever:
"before"*



*Down to nothing
but a steel hull*



*Achiever gets a
new transom*



*New cabin &
wheel*



*Achiever's
relaunch*



*Achiever in
her glory*

Predators in the Gulf Islands

In addition to being intelligent and charismatic, large carnivores such as cougars, wolves, and bears are crucial components of coastal ecosystems. As top predators, these species maintain balanced food webs by keeping smaller “mesopredators” (e.g., raccoons) in check, preventing them from over-consuming their prey and thereby protecting biodiversity.

In BC's Southern Gulf Islands, where almost all large carnivores have been extirpated, researchers have found that unchecked predation by raccoons has led to dramatic reductions in songbirds (up to 70% decline) and nearshore marine species (up to 95% decline). Field experiments suggest these declines are largely due to fearless raccoons that spend much more time eating, and hence increasing their impacts.

Work in Clayoquot Sound - where black bears, wolves, and cougars persist - is examining how their presence, and the fear they instill in mesopredators, shapes coastal food webs. Understanding the causes of conservation problems can frame solutions. Could co-existence with lost carnivores be a solution to declining species abundance in the Southern Gulf Islands?



Ocean Light II Adventures



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Three book covers are displayed side-by-side. The first is 'The Real Thing: The Natural History of' by Ian McTaggart Cowan, featuring a seagull. The second is 'Tod Inlet: A Healing Place' by Gwen Curry, featuring a forest scene. The third is 'Saving Farmland: The Fight for Real Food' by Nathalie Chambers, featuring a farm scene. Below the covers are the titles and authors. At the bottom is the 'Think Outside' logo and the RMB logo with the website www.rmbooks.com.

The Real Thing:
The Natural History of
Ian McTaggart Cowan

Tod Inlet:
A Healing Place
Gwen Curry

Saving Farmland:
The Fight for Real Food
Nathalie Chambers

Think Outside

RMB
www.rmbooks.com

Profiles of individuals and businesses who deserve special recognition for their dedication and generosity in helping protect the lands, waters, and wildlife of coastal British Columbia.

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Raincoast shares MEC's passion for adventure and its ambition to conserve ecologically important areas in Canada. MEC has been an ally of Raincoast's for many years, supporting our conservation efforts on a variety of issues. Recently, MEC supported our website development and online engagement. Capacity building support like this is particularly hard to find, which shows that MEC understands our need to invest in effective communications. Beyond financial support, MEC staff and their members stand with us for places that matter. From all of us at Raincoast, for all of your support – thank you.

MEC



Senja Palonen
Community Investment Coordinator

In Memoriam: Ken Millard

July 10, 1941 to September 27, 2015

With the passing of Ken Millard this fall, we lost one of the most influential and effective champions for conservation in the Southern Gulf Islands and Salish Sea, as well as an exceptional soul who walked gently, but with great conviction, on this Earth. Before becoming the volunteer director of the Galiano Conservancy Association in 1989, Ken was a distinguished physicist and also one of the world's finest makers of baroque violin bows. At minimum, he leaves behind a legacy of more than five hundred acres of protected lands and shores on Galiano Island. His strategic mind, humour, grace, and principled integrity are what captivated so many to listen to, and then manifest his vision and ideas.

Rest in Peace Ken - you are missed by many.



Tracking Raincoast into 2016 photographers

Megan Adams: p.14 (hair snag), p.19 (bear tracks)

Rosie Child: p.16 (Christina Service)

Chris Darimont: p.3 (Paul Paquet inset)

Gerald Durrell: p.3 (Paul Paquet background)

Ross Dixon: p.2 (grizzly & cubs), p.22 (billboard), p.28 (grizzly)

Keith Erickson: p.24 (Ken Millard)

Brian Falconer: p.24, 25 (Achiever refit insets)

John Gussman: p.20 (Chris Genovali), p.24 (Achiever)

Brad Hill, naturalart.ca: p.22 (billboard wolf)

Ian Hinkle: p.13 (Fraser River delta)

Howard Humchitt: p.11 (humpback)

Evan Leeson: p.7 (Salish Sea)

Misty MacDuffee: p.10 (killer whale), p.16 (grizzly swimming)

Paul Paquet: p.13 (salmon bbq), p.23 (wolf pups), p.24 (Achiever "before" and "in her glory")

Klaus Pommerenke, bears-and-more.de: p.22 (wolf pup)

Raincoast, p.11 (Ring-billed gull)

Andrew Rosenberger: p.9 (map, drift card)

Jenny Uechi: p.8 (Andrew Rosenberger)

Lori Waters: p.4 (eagle), p.12 (poster: everyone loves salmon), p.17 (figure: human superpredators), p.22 (wolf cull billboard).

Rich Wheeler: p.28 (Senja Palonen)

Andy Wright, cold-coast.com: front cover (Spirit bear), p.6 (Calvert Island), p.12 (sockeye salmon), p.14 (grizzly with salmon), p.15 (Spirit bear & cubs), p.20 (grizzly forest)



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