

GUARDIANS

OF THE COAST



Darimont. PHOTO: UVIC PHOTO SERVICES

Researchers and Indigenous communities work to protect BC's iconic coastal wildlife

by Patty Pitts

As a young boy, Chris Darimont spent idyllic summers exploring the shorelines of the Gulf Islands. Now, as a geographer at the University of Victoria, Darimont is still examining life on the coast, and what he's learning is having a profound impact on our attitudes about wildlife management on the coast and beyond.

Darimont's primary focus is the complex relationship connecting grizzly bears, wolves, salmon and humans, working with the coastal communities whose knowledge of wildlife long preceded his own.

For his PhD at UVic, Darimont collaborated with the Heiltsuk First Nation near Bella Bella to study the ecology and evolution of the area's wolves. The landmark study affirmed long-held Indigenous knowledge that coastal wolves are a different form from their inland cousins, mainly due to their primarily salmon-based diet.

"We used molecular, genetic and dietary approaches to add a new level of fascinating detail to what many people along the coast already knew," he says.

Salmon also figure prominently in Darimont's other coastal studies. In 2014 he participated in studies of stress hormones

from grizzly hair samples in BC's Great Bear Rainforest. The team learned that lack of salmon increased stress in bears, potentially reducing their ability to reproduce.

"This work revealed an important link to explain why grizzly bear populations need salmon," says Darimont. "It's a key piece of the puzzle in bear and salmon conservation."

Maintaining healthy bear populations is at the heart of what Darimont sees as the BC government's most contentious wildlife management position—supporting the grizzly bear trophy hunt. "To kill something not to feed a family, but instead to feed one's ego? That's outdated resource management policy that belongs in the '50s," he says. "Only a small proportion of hunters won't let it go."

Two cornerstones of Darimont's research are to produce results that encourage management policies based on solid science and to work closely with coastal Indigenous communities.

"What we learn through our partnered relationships with these communities informs their own decisions about wildlife management as their governments re-assert their authority over resource management. It's not just a 'business only' relationship. Our partnerships thrive on friendship and trust."

Darimont respects the Indigenous idea that animals should be treated like relatives, deploring the "super-predator" practice of serial depletion. "When one resource is brought to its knees, western resource management has in many cases just moved on to the next one," he says.

This approach captures too many spawning salmon before they can reach hungry grizzly bears and scoops up vast numbers of female herring for the commercial value of their eggs, wiping out potential for future breeding in the process, he says.

Darimont contrasts that with the Indigenous approach of sharing salmon with bears, and harvesting herring eggs spawned onto kelp, leaving the adults to breed again. "With rapid legal, societal and economic changes all around us, I'm excited for the resurgence of Indigenous-led resource management on this coast," he says.

In addition to conducting "good science that matters in the real world," Darimont is committed to ensuring that scientists' voices are heard when social policy is debated. "If I have certain expertise and know how much ecological harm policies can cause, it compels me to use my voice as much—or more—as any other citizen."

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EDGEWISE

Members of the public can learn more about Darimont's research during his upcoming illustrated talk "Guardians of the Coast: safeguarding salmon, carnivores and the habitats that sustain us all" on March 8, 7-9 p.m. in the David Lam Auditorium (MacLaurin A144). The presentation is part of UVic's Ideafest 2017.

As Hakai-Raincoast professor at UVic, Darimont receives research funding from the Hakai Institute and the Raincoast Conservation Foundation. Raincoast is among the organizations that convinced the Auditor General of BC to review the province's grizzly bear trophy hunting policy. Darimont made a submission to the review based on the results of his team's research.

Darimont and the PhD students and postdoctoral fellows in his Applied Conservation Lab at UVic are involved in several bear projects involving long-term, on-site, interactive residencies with coastal Indigenous communities. One in Wuikinuxv (Rivers Inlet) engages community youth through weekly outings to monitor the project's remotely activated wildlife cameras.

Meet Chris Darimont at <http://bit.ly/uvic-darimont>

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