

Feasting on their surroundings, travellers set up camp by a creek flowing into the Snake River. The Yukon's Peel watershed is home to a classic tussle between conservation and exploitation.

SNAKE RUN

A canoe descent of the Yukon's turbulent Snake River offers a view of a watershed battle and a meditation on the meaning of wild spaces

BY LESLIE ANTHONY WITH PHOTOGRAPHY BY FRITZ MUELLER

WHAT IS WILDERNESS?
The thought, which has hovered all morning, turns on its side as our float plane tips steeply into the alpine vale cradling Duo Lake, in the headwaters of the Snake River. Below, brocaded in olive, mustard and blue-green, Yukon mountainsides jut above jade spires of dwarf spruce and the puce darkness between them. The palette is unfamiliar yet vibrant. It exists here in an undisturbed state — undisturbed, that is, by us.

The definition of wilderness that I've been mulling is a matter of degree to the human mind: not *this* but *that*; some but not all; us but not them. The problem is that all of these constructs are ours, relative and contextual. Real wilderness defines itself: the natural intertwining of landforms and waterways; the presence of indigenous, co-evolved plant and animal life; intact ecosystems operating the way they have since they arose.

No matter the perspective, there is room for humanity, since we are a part and not apart. It would seem, however, that we must not mess with functionality — certainly not with the functionality of aquatic ecosystems, whose components are more easily perturbed and whose problems are quickly distributed over large areas.

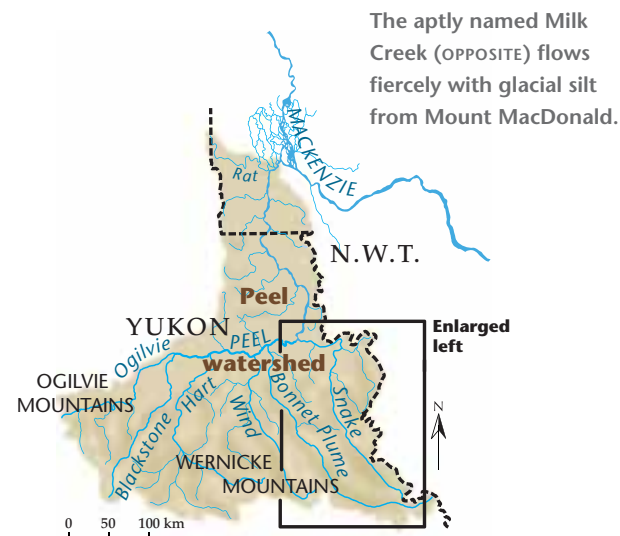
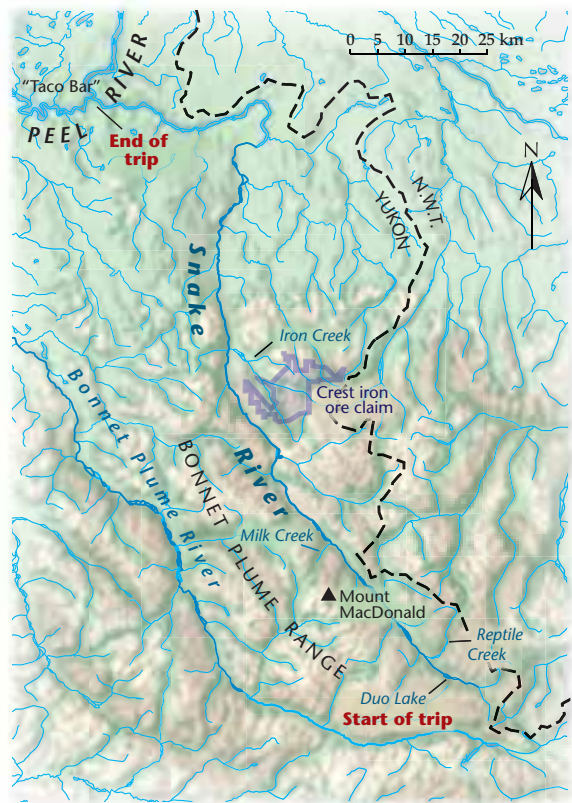


The idea comes sharply into focus as we near our destination, the isolated Snake River. The Snake is considered pristine: no roads, no residents, no development. It's a wild and rugged watercourse that we will follow for 10 days and 300 kilometres to its junction with the Peel River.

First and foremost, the trip is an exploration by canoe. But it will also offer insight into the hot-button politics of protecting the entire Peel watershed, of which the Snake is the last of six rivers — preceded, from west to east, by the Ogilvie, Blackstone, Hart, Wind and Bonnet Plume — to join the former's flow within the Yukon's boundaries (another, the Rat, makes the Peel's acquaintance in the Northwest Territories).

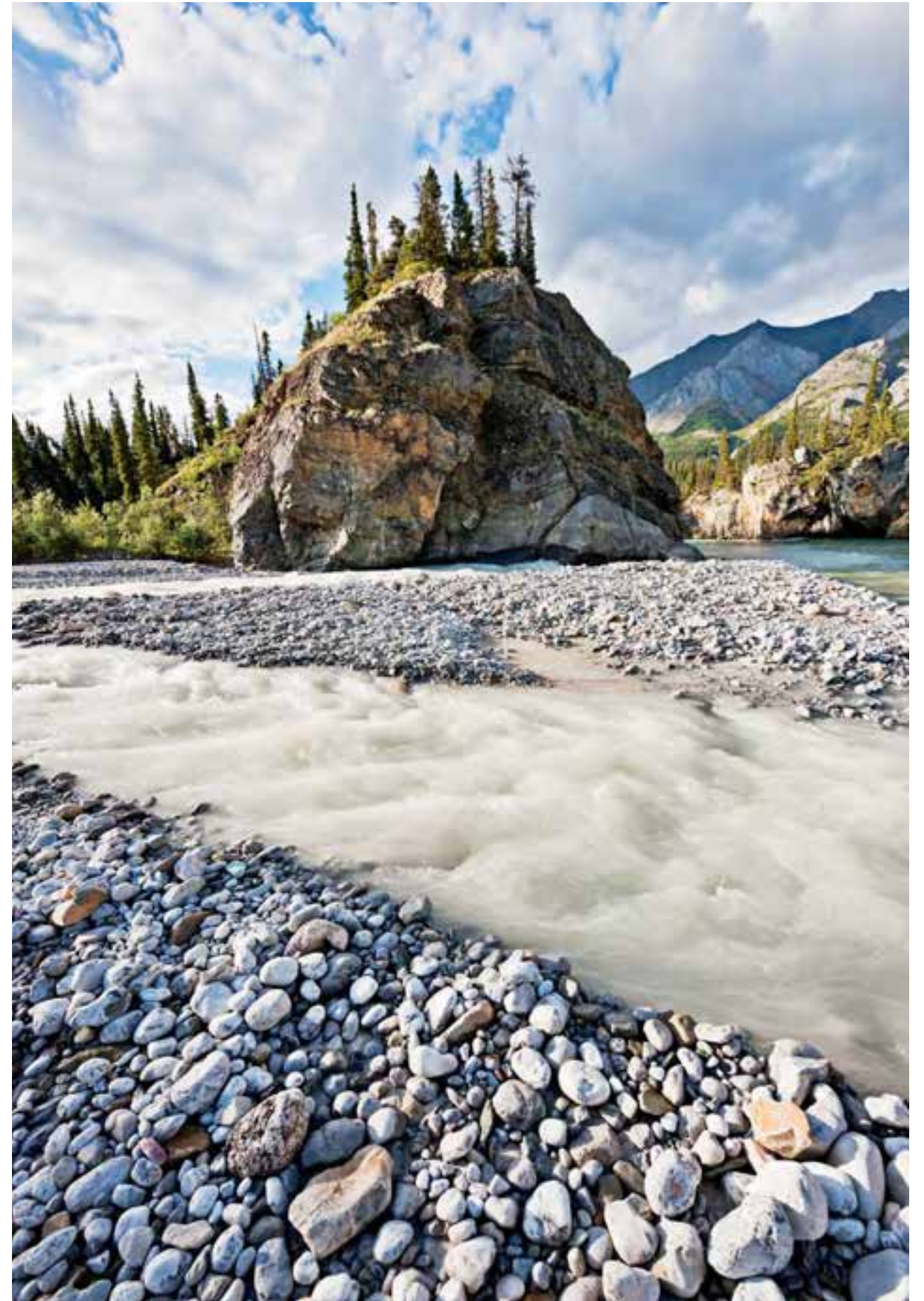
On the side of protection and conservation are First Nations with traditional hunting grounds in the Peel, backed by tour operators and environmental organizations, such as the Yukon Conservation Society and the Yukon chapter of the Canadian Parks and Wilderness Society. On the side of exploitation is the Yukon's traditional economic engine — the mining and oil and gas industries — intent on preserving leases that have been staked on uranium, iron and oil and gas deposits. A land-use planning process involving an arm's-length commission of stakeholders has been under way for seven years. It is winding down after having recommended to the Yukon government that 80.6 percent of the Peel watershed be fully protected and the rest closely regulated, a decision with overwhelming public support (see sidebar on page 58). With a final decision expected this fall, the fight for the Snake is heating up. A chance to experience it in its current state is an opportunity I can't turn down.

After all, if any place can school me on wilderness values, it should be a pristine river.



The aptly named Milk Creek (OPPOSITE) flows fiercely with glacial silt from Mount MacDonal.

MAPS: STEVEN FICK/CANADIAN GEOGRAPHIC





With their canoe and gear unloaded, trippers watch on shore as the Otter departs Duo Lake in soupy weather on its way to another rendezvous.

A striated outcrop greets paddlers on the upper Snake River (RIGHT). It is a familiar sight to Blaine Walden (BELOW), a wizened, 20-year veteran of trips on the Peel watershed's six major rivers.



WEATHER PERPETUALLY THREATENS in the Yukon, so it was no surprise that our pilot had to make this second attempt in two days to drop us off at Duo Lake. In the tiny community of Mayo, some five hours southeast of Dawson City, we had loaded gear into the high-powered Otter, lashed canoes onto pontoon struts, taxied onto the turbid and historic Stewart River and put the hammer down. A viridescent quilt of forest and moss quickly fell away, riven by the blue of serpentine rivers, their bends bracketed by sandbars and parenthetic oxbows. On higher ground, geometric patterns testified to the meta-processes that preceded

the forests. Dendrites of former drainages fell like dark veins between muscled ridges. Trees grew in fractal scallops on the halting deposits of glacial retreat. Arrays of circular lakes told a story of leftover ice chunks buried beneath rubble.

Now, as calm plateaus give way to bucking humps and sharp ridges, we encounter the same lowering wall of cloud that turned us back yesterday. Only this time, we squeeze through a mountain pass just as the curtain drops and descend in a slow spiral onto Duo Lake. In no time, our group — a Whitehorse-based crew consisting of photographer Fritz Mueller and guides Blaine and Mary Walden of

Walden's Guiding & Outfitting — plus our tonne of gear and pair of canoes are all on shore. The plane is reduced to a faint whine that tails off like the last note of a song, leaving us to the silence of a huge and dramatic landscape. Before we have time for contemplation, the drone of the plane's engine is replaced by the buzz of mosquitoes.

It is said that the Snake gets its name from a Gwich'in term (literally translated as "large hairy worm") and refers to a myth about a giant serpent that swallows all the river's boulders. Like the Wind and Bonnet Plume rivers, the Snake begins its northward flow in the Wernecke Mountains, a

northern extension of the Rockies and part of the Mackenzie Mountains Ecoregion. Remote and rugged, the river carves canyons through sub-range after sub-range, bisecting massive rock slides and braiding out into long gravel flats.

Any doubts about who these waters belong to are put to rest when we begin portaging to the river. Twice, we trudge loads one hour over alpine scrub, ford a creek, beat through a maze of willows, struggle across a hummocky wetland, burrow through another strangle of willows and land on the flood channels of the Snake. Mountains soar on both sides as we hump over the abundant tracks and dung of



moose, caribou, wolf and grizzly, whose diggings for bear root, a favourite food, are everywhere.

Returning for another load, sweaty and engulfed in mosquitoes, Mary spots something rustling the willows ahead and calls out. We watch as an adolescent grizzly crashes across the wetland and up the hillside, flattening willows as it goes. It stops to look back several times and, on its final turn along a mountain bench, feels safe enough to stand fully erect on its hind legs and aim its ears toward us, like a proverbial sasquatch. It's a fortuitous and thrilling sight so early in the trip.

The next day, we awaken to rain at our sandbar camp on Reptile Creek (the joke is that there are no reptiles in the Yukon). Once on the river, our heads are down navigating and lining a canyon full of rapids, but when the river breaks free of sheer walls and hairpin corners, the wildlife parade continues. Standing on shore with a plate of pancakes during a break in the downpour, I hear a loud splash downstream and turn to see a large caribou swimming toward us from the other side. It's oblivious until the last second when, sensing our presence, it turns into the current and disappears around the corner, its head bobbing in an icy train of waves.

The animal holds a special place in arguments to protect the Peel, whose massive 67,000-square-kilometre boreal eco-machine would comprise the largest protected area in the burgeoning Yellowstone to Yukon Conservation Initiative to relink wildlife corridors disrupted by continental colonization. "The Bonnet Plume woodland caribou may be the only herd in North America that doesn't have a single road through its territory," says Blaine, a wiry, wizened 20-year veteran of trips on the Peel's watercourses — with a baseball cap that looks to have accompanied him throughout — as he dishes out the last of the flapjacks.



Following a four-hour hike along animal trails, author Leslie Anthony (ABOVE) offers a tip of his cap to the big-wall panorama of the Mount MacDonald massif (LEFT).

That afternoon, the river braids out for the first time, and we bob below cliffs dotted with dirty white puffballs — Dall sheep munching the succulents they lust for — and crisscrossed by peregrine falcons. There's bird life aplenty: golden and bald eagles keep an eye on us as they lurch from log-jam to log-jam, while mew gulls and lesser yellowlegs guard their nests. We make camp at aptly named Milk Creek, which funnels finely ground glacial flour from 2,758-metre Mount MacDonald, the highest peak in the Bonnet Plume Range. The alabaster flow pours through three separate channels into the teal-coloured Snake, yielding an uncanny and alluring parfait.


During a layover day, we light out on a four-hour hike to a nearby peak, following an animal trail through dense, spongy spruce up a ridge that plateaus into sparser trees and mossy hummocks. Underfoot is a riot of lichens, bryophytes and small alpine plants: reindeer moss, dead man's fingers and even fairy parasol (which grows only on moose dung). As we ascend, alpine lupines cradling large, sparkling water drops in their axils offer a ready source for a quick drink.

Climbing up off the river, we are treated to the true breadth of the land. By the time we hit the scree of the upper slopes, we can see 100 kilometres in any direction not blocked by a mountain, and it's impressive to think this entire vista is unmarred and unoccupied, free for any animal to wander at will. That's a working definition for some conservationists. Juri Peepre, co-author of *Wild Rivers of the Yukon's Peel Watershed*, has said, "A wilderness is really a wild landscape where you can still roam free."

Wilderness, though, is not always pleasant. Cresting the summit ridge, we spy a silhouetted caribou. Suddenly, it looks up and bolts straight down toward us, zigzagging madly through the meadows, furiously shaking its head. "Botflies," says Mueller, a trained wildlife biologist who spent years studying caribou.

Shoreline willows and soaring peaks bracket the headwaters of the Snake River near Duo Lake.





From a gravel bar, Anthony and the Waldens take the measure of 2,758-metre Mount MacDonald, highest peak in the Bonnet Plume Range.

One of nature's nastier pieces of engineering, the botfly hovers in front of a caribou's snout, blowing eggs up the animal's nostrils. These hatch, and the larvae (bots) migrate into the nasal cavities, where they grow all winter; a big infestation makes it difficult to breathe. In spring, the caribou sneezes the larvae out, and they metamorphose into flies. This one looks to be trying to elude another round of egg laying.

After this Darwinian drama, we hike the final ridge to an overlook of MacDonald, a stunning big-wall panorama of Himalayan proportions. Its remoteness and low elevation mean it is rarely visited by climbers, despite spectacular 1,600-metre walls. Following animal trails back to camp, we waded through swaths of bear flower, a plant characteristic of the unglaciated areas of Siberia, Alaska and the Yukon, yet another of the Peel's dimensions: though much of it was heavily glaciated, a good chunk of the watershed missed out on the most recent Pleistocene party. This long-standing, unperturbed ecosystem holds significance for the future.

"One of the best ways that we can manage natural systems to ensure resilience to climate change is through protecting large habitat areas and ecosystems," explained Karen Baltgailis, executive director of the Yukon Conservation Society, when I spoke with her after the trip. "The Peel is exactly such a place — large, unimpacted, with linkages between different elevations, habitat types and latitudes."

From the perspective of a canoeist, hiker or climber, it's just plain cool. There are few places left on Earth to observe such large-scale diversity.

EXCEPT FOR ENCOUNTERING the occasional rock garden, our days on the river are braids and eddies, braids and eddies. And now, a week into the descent, a particularly strong example of the latter rips in from the right. We brace hard across it. "That's Iron Creek," says Blaine, directing us to pull over.

Iron Creek holds particular interest for outfitters such as the Waldens. Like many Yukoners, Mary and Blaine arrived from other parts of Canada to fall in love with this wild land. Growing up in Calgary, Blaine, 54, had wanted to go into the woods and build a cabin since reading Farley Mowat's *Lost in the Barrens*. In 1982, he answered an ad for a rafting guide and has led river trips ever since. One of few people to have descended all the Peel's rivers on the Yukon side, Blaine runs sled dogs during winter. Mary, 50, is a journalist who left Saskatchewan in 1988 to be a reporter at the *Yukon News* and later the CBC. She now focuses most of her writing on protection of the Peel.

On this trip, one of their goals is to visit a site where, 50 years ago, the Snake dodged a bullet. In 1963, California-based Standard Oil (now Chevron) cleared an airstrip on a forested plateau and erected a camp to conduct oil and gas exploration. It didn't find any, but 14 kilometres up

**Climbing up off the river,
we are treated to the true
breadth of the land.**



Weighed down by supplies, guide Mary Walden is undaunted as she crosses an alpine meadow (ABOVE RIGHT). Bursting from the rocky shoreline, river beauties (ABOVE) add a purplish-pink exclamation mark to a rugged landscape.



After remaining mute for half a century, Chevron, as of this writing, has committed to a two-phase cleanup that will comply with all government regulations. The first phase, to begin this summer, will involve the removal of debris and soil testing. In 2012, the company will undertake any necessary soil remediation. The cleanup might be a double-edged sword: although belated and welcome, it is also necessary if Chevron holds any hope of acting on its stakes in the area.

“Once mining activities are completed, we have to restore the land to a level where it conforms to the surrounding landscape and allows for other uses,” said Claire Derome, president of the Yukon Chamber of Mines, when we spoke later. “I’m not saying that happened 30 years ago, but these days, that’s how we conduct our business. Mining is one way where people living in the community can earn a living. Without that, there’s little else that’s taking place here.”

this formerly unnamed creek, geologists did stake leases on what, according to Chevron, was believed to be the second largest iron ore deposit in the world. Chevron currently holds 525 leases on this so named Crest deposit, totalling 27,827 hectares (an adjacent lease in the Northwest Territories adds another 3,915 hectares). Remoteness has kept the find in the ground; the long-abandoned staging site, however, is rumoured to be contaminated. The Waldens want to see for themselves.

The gravel bar we pull out on is peppered with hematite-jasper ore, blood-red and alien amid the light-coloured cobble. It is strangely beautiful, but a potential disaster for the Snake. Iron extraction is a messy, disruptive business.

In spitting rain, we hike far up the creek before turning into the bush. It’s difficult going as we struggle through mosquito-swarmed spruce hummocks and then outright swamp toward an unmapped destination. Suddenly, I come across old cut trees clad in thick moss. Almost immediately, we find oil cans, aviation fuel barrels, an airplane pontoon and other big-ticket garbage near the overgrown airstrip, as well as several dilapidated plywood shelters used as a fall hunting camp by outfitters.

Chevron’s leftover trash encourages hunters to treat the site as their own modern-day dump. We discover suppurating batteries and rusted-out fuel drums whose contents have percolated into the soil. Here, grizzlies, attracted to oil, have created mud baths. We also find an old fuel tower leaking oily water into a large, well-trodden puddle. The tower is now a rub, with wisps of grizzly hair attached to bolts and the jagged edges of rusted metal. As small and removed as the site may be, it not only is clearly contaminated but is affecting local wildlife. If this is the cost of but one tiny, unfulfilled wilderness transgression, what would an entire mine complex and network of roadways beget?

DAY 10, OUR LAST DAY on the river, is sunny but gruelling. Wind and squalls fill the air with fluffy cottonwood seeds that, like the snowflakes they resemble, stick to everything. The water is rising, growing browner and nastier, adding the hazard of new channels roaring through gravel bars crowded with old log-jams.

Steadily rising water means it is still raining somewhere, and the dangerous flood conditions demand careful cornering manoeuvres. For 50 kilometres, we skirt threatening sweepers, islands of collapsed riverbank and enormous floating trees that only hours before had stood tall on ground they had occupied for hundreds of years. It’s tenser than picking through rapids and a stark lesson in the dialectic of wild rivers — their eternal tearing down and building up.

Eventually, the water slows and grows bigger, working through soaring cutbanks peppered with mineralized nodules from much further back in time. The nodules contain the fossils Mary has read about in the journal of Charles Camsell.

Camsell was born in the North and travelled extensively throughout the Yukon and Northwest Territories as a geologist for the Geological Survey of Canada. Typical of the old-school explorer/bureaucrat, Camsell felt the only way to appreciate Canada was to see its North, with an eye to the riches of both experience and development. His travels in the region led to the first comprehensive report, in 1906, on the



A relic from Chevron's oil explorations, a rusted-out fuel tower is now a rub for grizzlies. Nearby, a found fossil is a relic from a different era (BOTTOM).

Peel and its tributaries. In 1929, Camsell's journeys inspired him to start The Royal Canadian Geographical Society (which gave birth to this magazine).

Mary hopes to find the deposit Camsell described on this section of river: a small stream mouth stacked high with oxidized, iron-rich nodules. Pulling over at a likely-looking alluvial cone on an outside wall, we are greeted by what seems to be the fossil trove heralded by Camsell: brachiopods, ammonites and other molluscs; trilobites, coral fans, worms and their tracks. A scattered brilliance of organic art. "Wow, look at these things," laughs Mary, turning the sharp, ochre impressions in her hands. Hiking the creek, we discover more fossils, gaining an understanding of how the nodules have washed down over time to crack open and accumulate in such an improbable pile.

Back at the canoes, the omnipresent wind howls into the corner, lifting sandstorms from the towering walls and encouraging us to depart before these slap us in the face with contact-lens-finding accuracy. Behind, we leave one of the watershed's many paleontological treasures. Perhaps not as impressive as the mammoth tusks Blaine famously plucked from the banks of the upper Peel, but of enduring scientific interest nonetheless.

By the end of the day, the canyon is in shadows. When the Snake finally debouches into the Peel, it is with little fanfare other than a strong eddy line to

Chevron's leftover trash encourages hunters to treat the site as their own modern-day dump.

be ridden carefully north. Having already received five major rivers, the Peel here is already huge. A few kilometres farther, along a sweeping wall of sediment towering 100 metres above the water, we arrive at Taco Bar.

Marked by a protected eddy channel that's easy for a plane to taxi on, Taco Bar (so named for one pilot's revered dinner creations) is the pickup point for those with no desire to tack on the extra four-day paddle to Fort McPherson. It's also the terminus of Canadian Parks and Wilderness Society's 2003 Three Rivers Journey, during which 18 artists, writers, journalists and photographers made three simultaneous journeys down the Wind, Bonnet Plume and Snake rivers. After weeks on the water, they were met on Taco Bar by members of the Gwich'in First Nation, who welcomed the paddlers with a feast. Creative works generated from this journey were assembled into a touring show that attracted international attention due to the unique cultural and ecological values of the watershed.





Avoiding a rough patch, Anthony and Walden line the rapids of the Snake (LEFT). From their Otter aerie, they view the Stewart River meandering through the Yukon wilds (BOTTOM).

Staking a claim for a watershed

The Peel River watershed land-use process grinds as slowly as Mount MacDonald's glaciers in northern Yukon.

In December 2009, after seven years of consultations, the independent Peel Watershed Planning Commission recommended that 80.6 percent of the region be withdrawn from staking and protected and that 19.4 percent become Integrated Management Areas, where mineral, gas and oil could be accessed only if there were no significant environmental deterrents. That winter, a round of public consultation revealed more than 90 percent support for the plan.

In February 2010, the commission received a formal response to its recommendations from First Nations and Yukon governments. There were no surprises. First Nations felt the proposal was inadequate, insisting on 100 percent protection. The government said 80.6 percent protection was far too much and sent the commission back to the drawing board. The mining lobby was equally unimpressed.

"The area we're talking about is huge," says Claire Derome, president of the Yukon Chamber of Mines. "It's 15 percent of the Yukon, which would add to the 14 percent that is already protected. You'd jump to having close to 30 percent of the Yukon set aside. This is way beyond anything that exists in Canada."

This fall, the commission will produce its final plan, which will go out for yet another round of public consultation, then be sent back to governments for final approval.

The slow pace may prove helpful to conservationists. The Yukon is again experiencing a boom; this summer expects to see a rash of new claims and increased work on established claims outside the Peel River watershed, mostly due to the strong price of gold and demand from China.

This much activity elsewhere in the Yukon may make it more widely palatable to set aside a large, intact wilderness. "The Yukon is in the middle of the largest mining boom in history," says Mike Dehn, executive director of the Canadian Parks and Wilderness Society's Yukon Chapter. "Given how well the economy is doing, it's hard to justify the government's plans for the Peel."

Today, there are no elders on Taco Bar to greet us, though bear, moose and wolf tracks are abundant and insects legion. We spend a last, subdued evening around a driftwood fire, sharing tea and river stories, the melancholy of finality tempered by accomplishment. We retreat to our tents thinking we will have a leisurely morning, time to take one last sip from this cup of splendid isolation.

The plane, however, shows up at 7 a.m., hours early in a bid to beat an approaching front. We haven't even had coffee but pack, load and take off in a time frame that can happen only in the North. Winging back to Mayo, we skim jackknifed grey waves and colourful troughs on a sea of empty mountains. First glimpses of a cabin or an airstrip elicit flashes of annoyance, as if these tracings violate our experience. Misplaced as such zealotry is, it says everything about the importance of protecting intact landscapes and watersheds. We instinctually crave the connections they offer.

In the end, we're back at the beginning, to the question asked by those who purport to want to protect watersheds: what is wilderness? Is it no human footprint or very little? Does long use and transient habitation by First Nations qualify or disqualify?



Without consensus, we look to nature, where one thing is clear: whatever the answer, it cannot contradict first principles of ecosystems or involve only piecemeal protection. A mine may benefit society, but only as long as the resource or changing economics of demand last. Furthermore, a mine

comes with both environmental and economic price tags for the inevitable cleanup. But *true* wilderness, the type that the Earth doesn't make anymore, offers wealth in perpetuity.

"The Peel is still raw and wild, unlike anywhere else in the country," wrote James Munson in the *Yukon News* in August 2010. "Development would end that forever. Forever can't be mitigated."

Leslie Anthony is a writer based in Whistler, B.C., and the author of Snakebit: Confessions of a Herpetologist. Photojournalist Fritz Mueller lives in Whitehorse.

L.A.



To comment, e-mail please editor@canadiangeographic.ca or visit www.canadiangeographic.ca/watersheds.