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COVER STORY



Kayaking in front of Northwestern Glacier at the head of Northwestern Fjord. DAVID GOODMAN / FOR THE FREE PRESS

Alaska as we know it today will not be the same in 50 years. Alaska is on the front line of climate change, with the titanic forces of sky, water and earth colliding in dramatic fashion.



DAVID GOODMAN
 Free Press Correspondent

Our sea kayaks drift slowly toward the imposing face of the glacier. Suddenly, our gaze is broken by what sounds like a rifle shot. My head snaps sideways to where my daughter and nephew are gently bobbing in their double kayak. Just then, I see a house-sized block of ice calve off the face of the glacier and vanish beneath the inky black water.

A large swell rolls towards us.

I instinctively dig my paddle into the water to brace the boat; it is not an option to take an unplanned swim among the icebergs. Our boat rises and falls harmlessly as the wave rolls past. I exhale.

Alaska promised drama. Grandeur. Beauty. Tranquility. Thrills. It was delivering — sometimes a little too close for comfort.

"The last frontier," as the Alaska license plate proclaims, had somehow eluded me in the years that I have followed my passion for exploring wilderness on foot, boat and skis. But suddenly this bucket-list trip felt urgent.

The reason is simple: climate change.

Sure, I've always wanted to go to Alaska for an epic adventure. But I also was motivated to go because Alaska as we know it today will not be the same in 50 years. Alaska is on the front line of climate change, with the titanic forces of sky, water and earth colliding in dramatic fashion.

Everything about Alaska is larger

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A humpback whale dives in Northwestern Fjord, Alaska. DAVID GOODMAN / FOR THE FREE PRESS

than life. The 49th state is twice the size of Texas and one-fifth the size of the rest of the United States. Its 6,640-mile coastline is half again longer than the East and West coasts of the United States combined.

The impact of the changing climate similarly has taken place on an extraordinary scale. Glacial retreat is one of the world's most visible indicators of climate change. Alaska has more than 100,000 glaciers covering 5 percent of the state—and a staggering 99 percent of these glaciers are receding. Some 40 cubic miles of ice might be melting annually in Alaska, and the state's vanishing glaciers are responsible for 8 percent of the rise in global sea levels—just in the past decade.

Climate change is largely a manmade disaster. Yet in spite of overwhelming scientific evidence of manmade warming—and this summer's record-breaking heat waves, droughts and wildfires—the fossil-fuel industry and its allies in Congress have succeeded in sowing doubt and blocking meaningful efforts to curb global warming.

In the next few months, barring intervention from President Obama, Shell Oil is expected to begin the first offshore drilling operation in the Arctic Ocean in Alaska's Beaufort and Chukchi seas, one of the most extreme environments on the planet. The renewed threat of oil spills, combined with the impact of warming, has turned Alaska into possibly the most contested and threatened landscape in the U.S.

So last summer, I ventured to the top of North America with my wife, Sue, our 19-year-old daughter, Ariel, our son,

Jasper, 11, and nephew Thomas, a 25-year-old marine scientist recently out of grad school. We wanted to experience Alaska and its endangered glaciers as intimately as we could: We chose to travel in sea kayaks deep into Kenai Fjords National Park, home to the Harding Icefield, the 700-square-mile expanse of ice that covers the southern portion of Alaska's Kenai Peninsula.

The Harding is the largest icefield in the U.S. But as we saw from our kayaks, it is shrinking by the day.

Land's end

Our trip begins in the fishing town of Seward, Alaska, a two-hour drive southeast of Anchorage on the tip of the Kenai Peninsula. There we meet up with guides Kayti Rowen and Brian Studioli of Sunny Cove Sea Kayaking (www.sunnycove.com). Kayti and Brian, an energetic and knowledgeable pair, orient us to what lies ahead. We will sea kayak for five days in Northwestern Fjord, a unique and remote landscape where five glaciers pour off the Harding Icefield, and three tidewater glaciers tumble directly into the sea.

"Northwestern is probably the most pristine place I've ever been," says an excited Kayti, a tall, effusive woman with an easy smile. "It makes me feel really small."

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THE NON-PROFIT

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Kayaking in front of Ogive Glacier, one of three tidewater glaciers at the head of Northwestern Fjord. DAVID GOODMAN / FOR THE FREE PRESS

The boundaries between man and nature, between modern and primitive, between environmental policy and reality, all vanish here in the Alaskan wilderness. As politicians equivocate, and fossil-fuel companies obfuscate, this icy wilderness simply disappears.

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At 5 a.m., we are driving on a rough road chipped into the side of a cliff. About 15 minutes outside of Seward, the road vanishes into the water. This is land's end, Alaska.

A steel skiff awaits us just off shore. We change our mode of transport and load four sea kayaks and a week's worth of food and camping gear onto the boat. Chance Miller, the raffishly handsome 27-year-old skipper, backs the skiff out into blustery Resurrection Bay and begins the several-hour journey to Northwestern Fjord. As we motor out into the Gulf of Alaska, he motions with a sweep of his hand to the vast body of water around us.

"Welcome to the largest expanse of wilderness on Earth," he says. "The next landfill is Antarctica."

This waterscape teems with life. Our boat passes an island crawling with thousands of barking Steller sea lions. Birds circle overhead crowing hysterically, and puffs peer out quizzically from their rocky perches. Miller casts his deep-sea fishing rod overboard and lands several 10-pound fish in quick succession, as easily as if reaching into a fish bowl.

After several hours, our boat makes a broad turn and slows down. A deep fjord hemmed in by towering rock walls and glaciers opens before us. We have arrived in

Northwestern Fjord (also known as Northwestern Lagoon). Miller glances at a GPS but does not pay it much heed.

"Ten or 20 years ago, we had no charting at all of these areas. It was just local knowledge where to slow down," he explains as he maneuvers the boat around unseen underwater hazards. "Even now, it's charted but not well. This is still a raw pioneer-type place. When you look at pictures, you realize how much it has changed."

Once ice, now sea

The pace of change in Northwestern Fjord has been breathtaking. Since being named on a 1909 expedition by Northwestern University geologist Ulysses S. Grant (no relation to the 18th U.S. president), the glacier that covered the fjord has retreated more than six miles.

Indeed, everywhere we will be paddling for the next five days was covered in ice less than a century ago. Scientists note this is evidence the climate has been warming since the last Ice Age — but the pace of change has accelerated dramatically in recent years due to human activity.

The loss of glaciers has serious implications for the global climate. Glaciers regulate regional surface temperatures. Even slight changes in surface temperatures

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Curious sea otters swim over for a closer look at our sea kayaks, Northwestern Fjord. DAVID GOODMAN / FOR THE FREE PRESS

in Alaska contribute to powerful global atmospheric changes that have never been experienced before. When glaciers melt, sea levels rise, threatening to displace millions of coastal residents around the world.

The rapid changes in the land lead Chance Miller, whose family has been running a water taxi to these remote fjords for decades, to question what will happen to Alaska, and to his way of life.

"I wonder, 'Is it a viable thing to keep taking people to these places? Are they going to be around that much longer? Will people want to come here?'" Miller says.

He peers out at the fjord's stunning hues of green, white and gray and concludes, "The answer is basically yes. ... It is a beautiful place, and it always will be."

Miller finally pulls up onto a rocky beach, unloads my family and our multicolored mountain of gear, makes arrangements for a pickup in five days, and bids us farewell. The sound of the boat's motor fades and instantly is replaced by the shriek of a bald eagle circling overhead. I look along the beach and see a large bear scampering away.

We are alone in a landscape of mythical scale. Waterfalls tumble 700 feet down a cliff face, the height so great that the water simply vaporizes before hitting the ground. Massive glaciers at the far-off head of the fjord twist and split like a slithering snake, then plunge dramatically into the sea. It evokes images of Harry Potter — of magical creatures soaring and darting about and the intoxicating sense that danger lurks just out of sight.

For 11-year-old Jasper, the best magic in this place is happening at the end of his fishing rod. Within an hour of our arrival, he reels in a 12-inch cod, which quickly becomes a dinner appetizer. Sensing a kindred spirit and an opportunity, our guide Brian, a Florida native and avid angler, politely asks if he can borrow my rod and share a kayak with Jasper for the next few days. From that moment on, their kayak is transformed into a fishing boat with a line permanently in the water.

Meanwhile, my nephew Thomas, flush with knowledge

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Without action to stop climate change, there is the very real prospect that this breathtaking landscape might not exist when my kids return in kayaks with their children. It is one of many reasons to fight to save the ice.



Anchor and Ogive glaciers, two of the three tidewater glaciers that terminate in the sea in Northwestern Fjord. SHANE GOODMAN FOR THE FREE PRESS

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about all things aquatic, manages to reel in only seaweed.

"It's OK," I console him. "There has to be one guy in the entire state of Alaska who can't catch a fish."

Deep encounters

As we travel deeper into Northwestern Fjord, the seven of us increasingly are dwarfed by our surroundings. Soaring rock walls tower overhead, polished clean by the retreating glaciers.

On our third day, Jasper and Brian are paddling lazily when they sense that they are not alone. Suddenly, about 50 feet in front of their kayak, a humpback whale shows a tall spout of water. Its massive, bearded-encrusted tail flukes are visible before vanishing beneath the water's surface. A sulfurous stink lingers in the air.

Our kayakers come to a standstill. We are unexpectedly in a dance with this primordial creature. The whale

resurfaces a few hundred feet away, then dives again.

"Let's head the other way," urges Sue from the front of my kayak.

But I can't break free from this call and response with the world's largest mammal. The whale breaks the surface again, this time about 75 feet away, then blows another water spout before disappearing. We all drift toward the center of the fjord, giving each other enough room to maneuver in case one of us needs to get out of the whale's way — quickly.

Kayti assures us that the whales — which weigh about a ton per foot and strain water through their beak-scented small food passes through their grapefruit-sized throats — are curious but not aggressive to kayakers. "But I've never had one come this close before, either," she says breathlessly.

About 15 feet in front of Jasper's and Brian's kayak, the water abruptly parts to reveal the whale's shiny black humpback. Its massive tail momentarily stands straight up, water cascading off it, then silently disappears again.

"I felt like I could reach out and touch it," Jasper ex-

claims. "That was freaky!"

"That was way too close," declares Sue, whose voice belies the mix of awe and alarm that all of us feel at the encounter. We paddle onward in amazed silence while the whale swims slowly away.

The last glaciers?

The temperature drops noticeably as we round the head of a large granite island on our fourth day of paddling. Suddenly, three tidewater glaciers burst into view. "Bergy bits" — small, flaking pieces of ice — are everywhere. My paddle pushes off against the ice as we glide slowly through this slurry.

Kayti paddles in the lead and acts as an icebreaker, clearing an ephemeral path for us to follow closely behind through the icy slurry that she calls "margarita mix."

Harbor seals abound on the larger ice pieces, and they closely track our progress through their world. The cute, doe-eyed creatures are skittish and playful, slipping off

their perches into the water anytime we come close, then popping up alongside our kayaks to get a better view of us.

Northwestern Glacier (named, like the fjord, for Northwestern University, one of over a dozen Alaskan glaciers named after American universities, such as the Harvard, Yale and Amherst glaciers located in College Fjord in nearby Prince William Sound) is the dramatic natural highlight of our trip.

It is a tidewater glacier that ends abruptly in the sea. The vast swath of blue ice appears smooth in the mountains above, but as it approaches the water it breaks into what look like rows of chess pieces that march slowly and inexorably downward. We float a quarter-mile from its face, alert for the large pieces of ice that constantly are calving into the water and sending rolling waves in our direction.

The cracking, exploding Northwestern Glacier is the abrupt, violent edge of where the ice world meets the warming climate. The thunderous rumbling of the glacier is the soundtrack to this epoch.

SEA KAYAKING IN ALASKA

» **Kayaking:** I arranged our sea kayaking trip into Kenai Fjords National Park (www.nps.gov/kenai) with Sunny Cove Sea Kayaking (www.sunnycovekay.com), a guide service based in Kenai.

» **Alaska travel:** Tips to Alaska start with a flight to Anchorage, the state's largest city (but not the capital, which is Juneau). You can reach Juneau by renting a car and driving for two hours, or taking a train or a bus. For general information on traveling in Alaska, see the official state tourism website, www.travelalaska.com. A good resource for wilderness travel in Alaska is www.viewofalaska.com.

» **Climate change:** For general information about climate-change science and action, I recommend starting with Veronique Bill McQueen's *Low 360*, www.360.org. Climate Progress, <http://climateprogress.org/en/index.html>, is an excellent source for current news and commentary on the subject. For a list of the top 500 scientists on climate change, see www.world.org/worldclimate.

The boundaries between man and nature, between moderns and primitives, between environmental policy and reality, all vanish here in the Alaskan wilderness. An optimistic equivocate, and fossil-fuel composite dilettante, this icy wilderness simply disappears.

Without action to stop climate change, there is the very real prospect that this breathtaking landscape might not exist when my kids return in kayaks with their children. It is one of many reasons to fight to save the ice.

The glacier's crack and calve throughout our final evening. A humpback whale breaches in the distance. It feels as if we are present at the creation.

Which, so this endangered landscape continues to change, perhaps we are.

David Goodman is an author and journalist in Blaine, Me. He writes the Vermont Lives! column, which appears on alternate Saturdays in the Burlington Free Press. Contact him at dgoodman@mt.com, and follow him on Twitter at www.twitter.com/davidgoodmanmt.