

BILLIONAIRE



THE EXPLORER ISSUE BEYOND THE COMFORT ZONE

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MOVING MOUNTAINS

“Great things are done when
men and mountains meet;
this is not done by jostling in
the street.” — William Blake







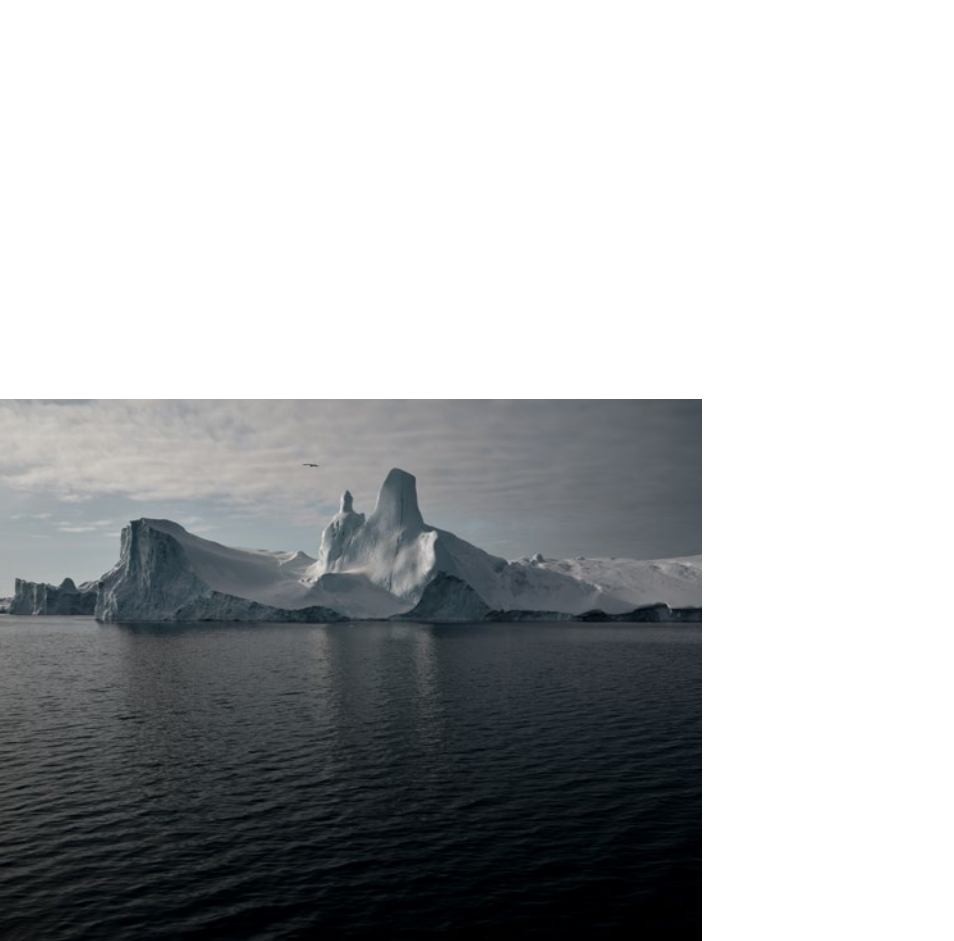
For centuries
the locals
have been
travelling
across the
icesheet with
their packs of
sled dogs.

New Lands

The second-biggest ice cap on Earth is losing ground,
impacting the map of Greenland.

Words by Clara Le Fort, photography by Stéphane Gautronneau

In Kullorsuaq, Greenland, photographer Stéphane Gautronneau looks out of the window. In the heart of winter, daylight is scarce and temperatures vary between -20 and -40 degrees Celsius. These are ideal conditions to photograph icebergs at night, under the full moon. It seems a picture-perfect setting, yet the reality is quite the opposite.



Sceneries are changing in Greenland, as the icesheet melts and cracks up. Icebergs are also disappearing faster than usual.

“I became a citizen of Greenland and established myself in the remote village of Kullorsuaq. Sharing my daily life with the pole’s last hunters, I’ve witnessed considerable change.”
— Nicolas Dubreuil.

Sitting next to him is world-class explorer, naturalist and expedition leader Nicolas Dubreuil. He has been living in Greenland for 30 years, and each trip to the Arctic is an opportunity to document the many ways in which the Inlandsis glacier (the second-biggest ice cap on Earth after Antarctica) is losing ground, impacting the map of Greenland.

A thick icesheet, the Greenlandic Inlandsis reaches 1,710,000 square kilometres and has been covering at least 80 percent of Greenland for the past three million years. In 2020, for the first time in human history, it rained on the Inlandsis. “It is melting faster than we could ever predict. It’s unprecedented, quite the cataclysm,” Dubreuil explains.

“For the past 30 years I have been exploring all corners of the poles whether on skis, by dog sled or on boats. Fascinated by polar regions, I became a citizen of Greenland and established myself in the remote village of Kullorsuaq. Sharing my daily life with the pole’s last hunters, I’ve witnessed considerable changes in what used to be a purely wild, dominant, and intact nature. Today, the ecological and cultural impact is huge. As glaciers melt, new lands and territories are being uncovered. Even though it is fascinating, it is the very sad result of humankind’s insanity,” says the French-born adventurer.

Speaking Greenlandic, Dubreuil is first and foremost fighting for humankind, starting with the local Inuit population. “I learnt everything I know about the Arctic from them. It is only

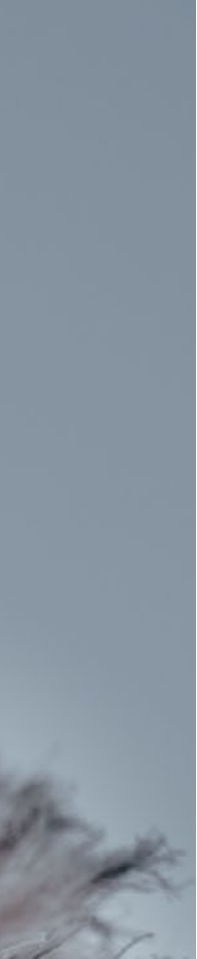
normal that I try to co-create everything with them. It starts with an open dialogue; with them sharing their view of any given situation rather than us imposing it on them.”

In the Arctic’s most remote villages, youngsters can be schooled up to about 18 years old but there is no university to go to. Many could become hunters or fishermen, but most want another future. One way forward is to help them follow their aspirations and train them to lead the life they want. “We bought a house and turned it into a training centre with a good access to technology. Numerous scientists, for example, need local staff to help them conduct topographical and technical surveys, to place markers on mammals to study and protect them. It costs them time and money to send teams to do that when they have the best possible scouts on the ground. We need to build the next generation of local scientists to document this unprecedented change in the Arctic. For centuries, we have arrived in new territories and have been lesson-givers. Today, it’s our turn to learn, and be humbled by their knowledge,” adds Dubreuil.

Recently, Dubreuil helped luxury cruise-company Le Ponant set up a ‘dry run’ for its North Pole expedition on board Le Commandant Charcot, the company’s newest ship.

“The only people that really know about the polar bears, the icesheet and ice sea are the locals. I brought two bear-hunters on to the ship to train senior expedition members on security





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Clockwise from left: Expedition-leader Nicolas Dubreuil, who has been living in Greenland for 30 years. Traveling on Le Commandant Charcot, Le Ponant's latest icebreaker, one gets to explore the Northern parts of the Arctic with scientists on board.



With climate change, settlements and villages are also fast-changing: with temperatures rising and unstable ice conditions, their lives are at risk.

and survival issues,” says Dubreuil. Training requires both theory and practice; learning about scientific models and currents is only a small part of the knowledge. “Nothing can be said to exist if it is not experienced,” he likes to quote. How does one identify, for example, surfaces where the ice is too thin to walk or ski on?

“I remember us skiing across vast landscapes; everywhere you set eyes, the ice looked identical,” Dubreuil remembers. “Yet, to our right, the ice was 1.5m thick, to our left, 5cm. We are not adapted to these surroundings: we have no knowledge, nor experience. Locals do, however, for they spend most of the year navigating on all qualities of ice and have been doing so for 4,500 years, passing down and refining knowledge through countless generations. They are the true sentinels of the Arctic,” adds Dubreuil, who further explains that locals use specific tools such as sticks to test the sound and vibrations of the ice. Only they can warn us on climate change’s true impact.

As Dubreuil embarks on a scientific expedition with Sedna, the scientific-led company he has just launched, he is appalled by what he sees. In front of his eyes are new islands, new valleys and hills in the making. Territories that were never seen before, don’t exist on maps, and don’t even have a name: true barren land replacing ice.

As local Inuit communities adapt, rethink their daily routes, he witnesses them having to come up with new names to call the islands, hills or peaks that have recently appeared. “The landscape is changing so quickly that maps are fast becoming obsolete. We are uncovering rock formations covered in lichen that used to sit under thick ice. They hold the memory of an untouched Earth and are now being exposed to pollution and daylight. We are losing part of our legacy; we have reached a point of no return,” adds Dubreuil.

“Nunanutaat” or ‘new lands’ are being formed at a scale beyond what we could imagine. New lands that change the surface of the northern polar regions. When photographer Gautronneau and Dubreuil set foot to explore the icesheet, the latter asked the local members of the expedition where to go.



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They pointed at the map and Dubreuil asked why they wanted to take them to the northern icesheet where all is monotonous, white and difficult to film. “There is no ice left,” they responded. If glaciers recede by 500m or 1km in the Alps, for example, the icesheet in this polar region has shrunk dramatically in comparison: “Imagine an area twice the size of Paris, 500m thick. That is what has melted in 30 years,” says Dubreuil.

“Locals are afraid of these regions as their parents didn’t witness them; in their animist culture, they respect the glacier and if the glacier had to recede due to mankind, it means the spirits in that region are upset. It is not worth going there; it would be disrespectful to their ancestors,” he adds.

Yet, financing research can play an important role in understanding the forces and changes at play. “Even when I was studying technology at university, budget and funding was scarce. Today, without private funding, we will keep on losing ground to climate change,” says Dubreuil. He is about to embark on a new trip to Antarctica, which at first was only supposed to be recreational. Dubreuil was on the brink of refusing the offer but in 15 minutes the billionaire through whom he was contacted took the decision to finance a scientific expedition and fill half of the boat with paleo-climatologists, biologists, icesheet experts and atmospheric researchers.

Thrilled, Dubreuil further connected the expedition to international and multidisciplinary research programmes led by the Millennium Institute for Biodiversity of Antarctic and Subantarctic Ecosystems (Chile); Sorbonne University (France); Massachusetts Institute of Technology (US); Imperial College (UK); and the British Antarctic Survey (UK). Under his guidance, the expedition will head to the Weddell Sea, a remote, ice-covered bay located on the eastern side of the Antarctic Peninsula.

“It contains one of the most natural marine ecosystems in the world, forms a unique habitat of exceptional biodiversity and is home to Antarctic petrels, Emperor and Adelie penguins, as well as many species of seals and whales. Far below the ice, the nutrient-rich benthic ecosystems are home to many marine species found nowhere else on Earth, such as siliceous sponges and cold-water corals. Its relative isolation from the direct impacts of human activity makes it a suitable area to study indirect impacts, such as climate change and their consequences on the ocean, on sea and land ice and on biodiversity,” says Dubreuil.

He adds: “These are the kind of people that change — and will change — the way we think, act and lead scientific research. For we might find healthy solutions for the future of the planet in these most remote and untouched lands.” ◇

sedna-explore.com



Daily scenes of traditional Inuit life: living outdoors, they have an innate knowledge of the cold.

