Traveling Through the Arctic Hampered by Melting Ice

By ELIZABETH ANDRE

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Educators and explorers Will Steger, John Stetson, Elizabeth Andre and Abby Fenton have joined four Inuit hunters on a 1,200-mile, four-month-long dog-sled expedition across the Canadian Arctic's Baffin Island.

The expedition is traveling with four Inuit dog teams over traditional hunting paths, up frozen rivers, through steep-sided fjords, over glaciers and ice caps and across the sea ice to reach some of the most remote Inuit villages in the world.

Nowhere on Earth is the climate changing more rapidly or more dramatically than in the Arctic's Baffin Island. Will Steger's Global Warming 101 Expedition team witnessed first-hand some impacts of global warming as they traveled by dog team from Iqaluit to Pangnirtung.

Warmer-than-normal temperatures made it difficult to simply walk from the land onto the sea ice in Frobisher Bay. The tidal overflow along the shore was not refreezing. Instead the water remained liquid or slushy. The expedition members had to pick their way across the more solidly frozen sections. Even so, however, the team members' feet sank into the slush, which soaked their moose-hide mukluk boots.

During pretrip planning the team assumed only the American members would sleep in tents. The Inuit members planned to make an igloo every night. Because of differences in the normal snow conditions, however, making igloos was impossible. In many places there was simply not enough snow.

In other places, the snow had weak and soft layers that made blocks cut from it collapse instead of stand up. Living conditions are much warmer inside an igloo than inside a tent, so it was a disappointment to the Inuit members to not be able to build igloos.

On the Hall Peninsula, as the dog teams made their way overland from Iqaluit, the team crossed a small flowing creek that was completely open, unfrozen water. Theo Ikummaq, the Inuit team leader, said that at this time of year the creek should be frozen solid. The temperatures on South Baffin Island have been, however, as much as 40 degrees above normal during the weeks before the expedition's departure.

The 60-mile-wide Cumberland Sound stretches between the Hall Peninsula and Pangnirtung, the expedition's second village. Inuit elders recall a time when they could dog sled and snowmobile straight across Cumberland Sound to ice fish for turbot and seals, and to reach hunting camps on the other side. This year, however, the team heard reports of the worst ice conditions ever; even seal pups were reported to be falling through the ice.
When the team reached the Sound, its fears were confirmed; open water stretched all the way to the top. The team had to add 70 miles to its trip to skirt around the open water. In some places, large polynias -- or open sections of water -- separated the team from the shore. Ikummaq said many of these polynias were larger than normal or in places where there had traditionally been only solid ice.

The team safely arrived in Pangnirtung March 10. The next day, however, the ice over which the team had traveled broke up. There have been several recent incidents of Inuit hunters drifting out to sea on ice that breaks away from the shore. Boats rescued the hunters, but the hunters lost all their equipment and snowmobiles. If the ice had broken up as the Global Warming 101 team was traveling over it, rescue would have been difficult.

Ikummaq talked with elders who have noticed eider ducks overwintering in Cumberland Sound for the first time this year. Elders report that normally eider ducks migrate south for the winter.

The team is now preparing for the next leg of the expedition, from Pangnirtung to Qikiqtarjuaq through Auyuittuq National Park. Davidee Kooneeliusie, an Inuit elder and 34-year employee of the park, described to the team the route through the park. He said the ice and snow conditions on the route deteriorate every year, and this year they are the worst he has ever seen.

Kooneeliusie showed the team photos of the route, which follows a river bed. Boulders the size of small cars choke the trail. Between the boulders is glare ice. Kooneeliusie said in the past there was more ice in the rivers, and that ice covered most of the boulders. He also said there used to be more snow to cover the rocks and ice. Getting the dog teams and heavily laden sleds through the trail will be physically and mentally strenuous.

Numerous glaciers carve their way down from the Penny Ice Cap and surrounding peaks. Ironically, the name of the park translates to "the land that never melts," but the glaciers are now receding rapidly. Fifty years ago, the Fork Beard glacier, which the Global Warming 101 expedition team will pass on its way through the park, reached all the way to the valley floor. It has now receded more than 1,000 vertical feet and is no longer even visible from the valley floor.

The unusual ice and snow conditions make travel difficult for the Global Warming 101 expedition team. The conditions do, however, make it possible for the team to achieve its goal of providing an eyewitness view of global warming and its impacts on the Inuit people.

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