

Spinies are curious and playful. After materializing from the emerald haze, they quite often zip from one diver to the next, like lost puppies sniffing at the heels of strangers.

— Andy Murch



Spiny Dogfish

Text and photos by Andy Murch

and politicians



Dogfish



rather special. By counting the lines on their dorsal spines (a bit like counting tree rings), scientists have calculated that they are extremely long-lived sharks, possibly reaching the ripe old age of 70. They also hold the record for the longest gestation of

clocks leave them extremely vulnerable to overfishing. Off the coast of Europe, where spines have been relentlessly fished to supply the demand for fish and chips, populations are at an all time low.

Conversely, in the Eastern Atlantic, catch limits that were introduced a decade ago have resulted in an upswing in dogfish numbers along the eastern seaboard. Their stocks have rebounded to the point where there are reports of marauding plagues of spiny dogfish destroying nets and depleting other fish and

any living vertebrate (up to a whopping two years), and they do not reach sexual maturity until their late teens or early twenties.

are invertebrate species that fishermen trying to target. In an ideal world, big schools of dogfish should not be a problem. Historically, spines have always been abundant sharks. Veteran divers that were active in British Columbia back in the 70's and early 80's, relate tales of impenetrable clouds of dogfish tumbling over each other as they swept along the reefs in search of food. Their collective biomass would block out the sun, and their movements over the sea floor would generate a sand storm that reduced visibility to zero.

Unfortunately, their slow biological

You won't find Spiny dogfish on most shark diver's 'bucket lists'. In fact, the only time that your average diver will come into contact with a dogfish is when it is covered in batter, served with chips and bathed in an artery-constricting amount of salt and vinegar. It's ironic really, because as sharks go, these pint-sized predators are some of the most interesting sharks you're ever likely to bump into underwater.

Whale sharks for example, are interesting in a Goodyear Blimp kind of way, but they really don't do much other than swim monotonously forward, mouth agape, consuming copious amounts of plankton. If you've ever swum with one, you'll be familiar with their nonchalant stare and slowly weaving tail that quickly leaves you floundering in its wake. Not so with spiny dogfishes. Spines are curious and playful.

After materializing from the emerald haze, they quite often zip from one diver to the next, like lost puppies sniffing at the heels of strangers. If you bring them a few tidbits, they'll be your friends for as long as the food supply lasts. If not, once they have sated their curiosity, they generally disappear back into the fog, but their vibrant personalities are guaranteed to leave an indelible impression

even after a very brief encounter.

Physiology
Spiny dogfish are physiologically

Population
Unfortunately, in the brave new world of the 21st century where practi-

cally all fish stocks have been depleted, the oceans may no longer be able to support dogfish in such large numbers.

The wholesale slaughter of larger shark species is a big part of the puzzle. Overfishing of apex predatory sharks has left spinies with few natural enemies that are capable of keeping their numbers in check.

With many fisheries hanging in the balance, more and more fishermen are expressing that western Atlantic dogfish stocks should be culled to take them out of the fight for food.

Last month, spiny

big blow to shark conservation in general, but regarding spinies, perhaps that was a good thing.

Solutions

The sensible course of action would

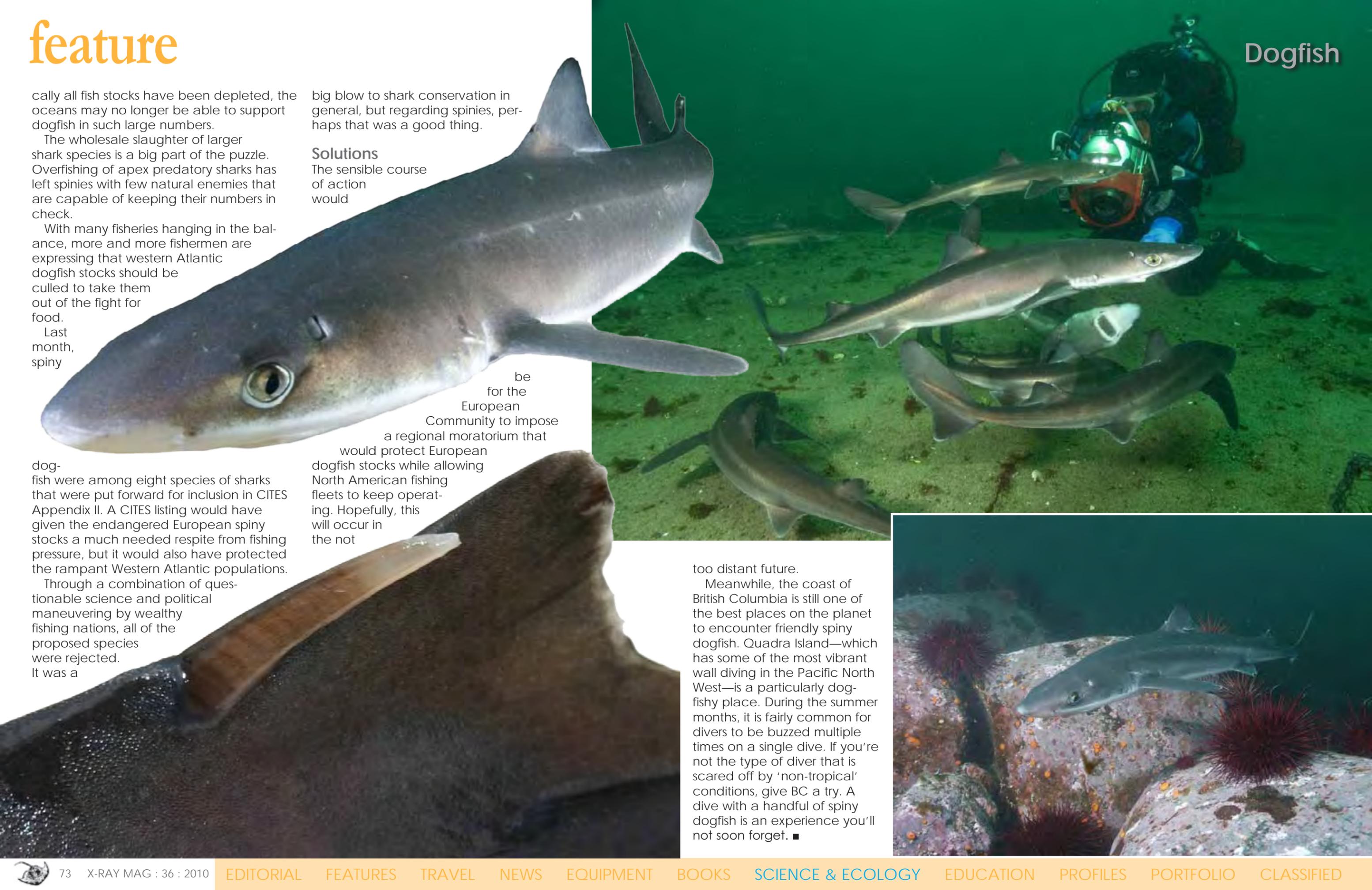
be for the European Community to impose a regional moratorium that would protect European dogfish stocks while allowing North American fishing fleets to keep operating. Hopefully, this will occur in the not

dogfish were among eight species of sharks that were put forward for inclusion in CITES Appendix II. A CITES listing would have given the endangered European spiny stocks a much needed respite from fishing pressure, but it would also have protected the rampant Western Atlantic populations.

Through a combination of questionable science and political maneuvering by wealthy fishing nations, all of the proposed species were rejected. It was a

too distant future.

Meanwhile, the coast of British Columbia is still one of the best places on the planet to encounter friendly spiny dogfish. Quadra Island—which has some of the most vibrant wall diving in the Pacific North West—is a particularly dogfishy place. During the summer months, it is fairly common for divers to be buzzed multiple times on a single dive. If you're not the type of diver that is scared off by 'non-tropical' conditions, give BC a try. A dive with a handful of spiny dogfish is an experience you'll not soon forget. ■





Text and photos by Barb Roy

Churchill

Trekking Canada's Sub-Arctic Region in Manitoba



THIS PAGE: A wall of curious Beluga whales approaches the divers, glowing golden from the tannins in the water and showing white humps at the surface (above). PREVIOUS PAGE: View of Hudson Bay from town

The arctic air was crisp as I waited for my dive buddy, Rob Pritchett, to roll back into the water from the Zodiac. While in the water I made a quick scan of the shore and bay for polar bears, since they are excellent swimmers and predators to be wary of. A light breeze rippled across the smooth sub-arctic surface of Hudson Bay, sending an icy chill down my back. While listening to the soft tranquil hum of the zodiac's idling outboard, I noticed a pod of spouting belugas change their directional path and head towards us. Excitement embraced an already exhilarating moment, as I fumbled to locate my camera. Within seconds we were surrounded at the surface! Their white backs gleamed in a late afternoon sun, and the murky tannin from the nearby Churchill River caused the belugas to glow an eerie yellow underwater. The previous day, we were told by a whale-watching guide that they will only come close if you're snorkeling at the surface, but today we hoped for more by using scuba.





Churchill

A sculpin fish sulks on the sea floor (left); Sea anemones are abundant along the coast (below)

At the surface, the rounded back of a Beluga can be seen half lit by the sun



Divers prepare to snorkel with the Belugas (left)

Tiny nudibranch can be found among fronds of sea flora (right)



Rob entered with a splash and we descended to 16 meters (55 feet) at the top of a flat pinnacle in Button Bay not far from the town of Churchill. Visibility gradually increased with depth, unlike the water temperature, which decreased to 2.7°C (37°F).

Life was indeed sparse in this harsh remote underwater wilderness, but the orange and yellow anemones, clusters of pink soft coral and several dozen decorator crabs seemed to be flourishing. Some sections were covered with dense patches of algae hiding invertebrate life, while others were bare and smooth with only a few sea stars. Hiding under a leaf of algae was a large armor-plated shrimp about the length of Rob's hand. I later learned it was probably a 'tank shrimp'.

As usual, I carried two cameras to document as much as possible. A high-pitched chatter of whistles and clicks seemed to tease us just out of sight. Doubting the Beluga would ever approach us underwater, I focused on obtaining macro images as quickly as possible, since my fingers were already growing numb after only 12 minutes of

bottom time! Some of my photographic subjects included a small nudibranch on an orange burrowing sea cucumber, more shrimp, a few sculpins and several amphipods, with the latter found in mid-water.

Just as my face was beginning to really feel the cold, Rob appeared in front of me and motioned to turn around. Not knowing what to expect, I slowly turned to discover a massive wall of belugas! Their accumulation was so great they filled our view.

Some were vertical in the water, others watched head-on and some slowly swam by. In awe, we watched motionless as about 30 came within six meters (20 feet) of us, then parted into two sections and swam in wide circles around us with the two groups going in opposite directions. They bobbed their flexible heads—their cervical vertebrae are not fused—and swayed their 3-5 meter- (10-15 foot-) long one-ton bodies. Light vibrations seemed to emanate from them as they curiously bounced sonar echolocation waves off us for a



better understanding of what we were. "Oh shisnic!" I muttered aloud through my regulator, realizing I hadn't fired off a single wide-angle shot. For ten minutes they swam around us, sometimes pausing just out of reach, maybe for a closer look. A baby, still gray in color, hovered close to mom and watched. I often later wondered if we might have been the objects of their study. Or...perhaps our unusual structure and sounds (tanks and bubbles) sparked an interest for them to learn more. Nonetheless, there we

calmly sat, turning into scuba popsicles, experiencing one hell-of-a unique encounter, not soon to be forgotten!

Churchill

This was one of my first dives in the remote township of Churchill, Manitoba, over ten years ago. I had hooked up with Rob, an RCMP officer stationed in Churchill, through our mutual friend, Ian Hall, who operated a dive charter business in Nanaimo, British Columbia. Rob provided me with the use of tanks, weights and a means to



Churchill



CLOCKWISE: The flavor of rustic pioneer life distinguish local tourist shops like the Arctic Trading Company in Churchill; Wildflowers such as purple paintbrush decorate the fields in the spring/summer; Delicious local cuisine at the Lazy Bear Lodge; Sunset in the Canadian Sub-Arctic of Manitoba



get airfills at the local fire department.

There are mainly two ways for visitors to get to Churchill—fly or take VIA Rail, a two-day train ride from Winnipeg. Feeling adventurous I took the latter. Fortunately, I was also assigned a roomette or sleeping compartment on the train. If you are an underwater photographer, you will have an idea of how much luggage I was traveling with and how hard it is to separate a photographer from their equipment.

This tiny space was designed to accommodate only one, approximately 1.2x1.8 meters (4x6-feet) in size. Within this space was one cushioned chair next to an oversized window. A small toilet was located under the chair, and a tiny sink pulled down from the wall, complete with running water. The bed also pulled down covering the entire room. Showers and food service were in another train car. I must say though, the rhythm of the train was ever so soothing. Overall, quite the escapade!

Rob and I used a four-wheeler for the shore dives and rented a boat with a driver

for deeper dives, like the one described earlier. My lodging consisted of an inexpensive local bed and breakfast lodge where I had the opportunity to meet other travelers and back-packers from around the world. For transportation, I rented an old Ford pickup.

It was July then, and colorful wildflowers covered the countryside and scented the air with the fragrance of springtime. I must have spent hours in that old truck exploring one dead-end road after another. Churchill, however, was not without its challenges, and I'm not referring to the occasional polar bears one might encounter while out for an evening stroll after a meal of caribou stew. It's the mosquitoes.

When you have an environment such as Churchill, located on the western shore of Hudson Bay in a sub-arctic region, spring, summer and fall are limited to about ten weeks, thus creating an explosion of life! The same goes for the bugs. If I wanted to stop and photograph something—a beautiful sunset, a field of flowers or one of the 250



A sled dog sign tells it like it is...



COUNTER-CLOCKWISE: Canon at Cape Mary Battery (above); Polar bear cages; Polar bear tour bus; Using an off-road vehicle to get around town is the locals' preferred mode of travel. BELOW: Location of Churchill on global map of North America

Miss Piggy plane wreck (above); A local shows how to build a stone landmark called an *inukshuk* (left) — a tradition of the Arctic native peoples

species of migrating birds—I had to prepare my camera while in transit. When I arrived at the preferred site, I would park the truck (still running), quickly jump out to snap off as many images as possible during an average 30-second window before being inundated by the bugs. If more images were desired, I would simply run around the truck again for a 15-second window (bugs growing wiser to my tactics). Another sprint around the truck and I could often leap into the cab with minimal followers to later deal with.

Mosquito spray did help, but the little buggers seemed to know exactly to the second when the deterrent wore off. Even though the mosquitoes were a challenge, the journey was well worth the trip, especially to dive and see the belugas in such a natural setting.

Polar bears

Over the years, residents and business owners of Churchill have successfully survived by marketing their natural resources through ecotourism, utilizing almost every season.

Visitors arriving in late October and November are able to see polar bears from the safety of customized tour buses, as the bears await the return of the pack to continue with their hunting. Some bears tend to awake early, while others make their way back to the coast after being inland for some time. But if the bears arrive too early, they can pose a problem to unwary tourists.

I remember Rob telling me how he was part of a team who went out and rounded up bears that wandered too close to town. They would tranquilize them, put the bears into big round metal cages, and carry them off to the other side of the river away from town, or transport the bears (within the cage) by helicopter up to 20km (12.5 miles) north along the coast. He also said a few stubborn ones found their way back to town.

The bear patrol of today is still proficient in

keeping the town free of roving individuals and mothers with cubs. If you happen to see a dirty-white spot out in the tundra during July or August, or along the shore near the smooth boulders, there's a good chance it might be a polar bear—so keep in mind, they can eat you!

Arctic features

From November to March one can enjoy the brilliant colors of the Aurora Borealis dancing across the horizon. A milder version can also be seen during the summer, but not with the same grandeur. From late May





ANSGAR WALK / CREATIVE COMMONS



Churchill

LEFT TO RIGHT: Polar bears on Cape Churchill; A look-out with rifle watches for polar bears; Scene of the town of Churchill; Wild orchids can be found in the fields around town

POLAR BEAR POPULATION DECREASE:

According to a report entitled, *Left Off the List*, published by the David Suzuki Foundation, a decline of 22 percent of the Western Hudson Bay polar bear population—the most studied population in the world—has occurred between 1987 and 2004. Scientists have drawn a significant correlation between global warming, the earlier break-up of sea ice, and the weaker condition (e.g. reduced fertility rates) of the Western Hudson Bay bears.

through September migrating birds are thick, and their squawks become common sounds along the shore. My favorite was being able to watch a flock of sandhill cranes.

From a population of more than 20,000 belugas inhabiting western Hudson Bay, over 3000 arrive at the Churchill River estuary areas in July and stay through mid-August. This is the best time to view, study, kayak with and snorkel with these gentle creatures.

My second visit to Churchill was early August of 2009, just as tourism was winding down for the season. The Lazy Bear Lodge hosted my stay so I could check out some of the many activities

they had to offer. I also opted for flying in with Calm Air, shortening my trip by four days so I could do a stopover in Winnipeg on the way back.

Churchill still seemed to wear the look of an old northern frontier settlement, perhaps because it originally grew from a remote outpost in the late 1920's. Not much use for a rental vehicle any more because most of the tour companies now pick up their guests. Of the approximately 1000 year-round residents, four-wheelers are still the preferred mode of transportation, parked like cars everywhere. Some even fury navigators (dogs)!

Excursions

Unfortunately scuba diving is still not offered unless you pack in all your gear and my friend Rob was relocated. Visitors can however, participate in kayaking, whale watching and beluga snorkeling excursions.

The Lazy Bear is also preparing to offer inland fishing trips on the Churchill River along with wildlife sightseeing tours. After talking with Wally Daudrich, the owner, I gathered the Lazy Bear Lodge is willing to customize trips for just about any group. Their guides also seemed to go

out of their way in providing professional, knowledgeable tour guides.

Self-guided tours and interpretive talks are available through Parks Canada at the VIA Rail station and at Cape Mary National Historic Site, a stone battery originally constructed to provide additional protection for the settlement at the river's mouth. During both visits I found Cape Mary to be an excellent location for bird- and whale-watching!

During the latest trip, the guards posted with rifles on the walls were keeping an eye out for polar bears, rather than invading troops.

My first outing with Lazy Bear Lodge was a paddling trip on the river. The belugas came very close to the kayaks, and I'm sure the boats gave off a strange sensation when echolocation was used. Although a slight current pushed the kayaks around, rudders made it easy to maneuver. All around us, the belugas constantly spouted and released bubbles under the boats. Both adults and babies came close, their gleaming white and gray bodies standing out in the copper-coloured river water.

These majestic belugas will reach nearly six meters (18 feet) in length

and weigh up to 1,600 kilograms (3,500 pounds). They are very sociable and usually can be found in the Arctic and sub-Arctic waters above the 50th parallel. They love to play and have few natural predators (orca and polar bear).

Belugas are often called "sea canaries" because of their strange high-pitched whistles, clicking, chirping and other vocalizations. They are fond of this area for having their young and feeding on the river's rich run of capelin (small herring fish).

After playing with the belugas we ventured out on a land excursion to the wreckage site of *Miss Piggy*, a Curtis C-46 freight plane. The crash took place in 1979 while on approach to Churchill. Once again our guide brought along a bear deterrent (rifle). I brought my camera but never thought about shooting bears with anything else. During my previous trip, I visited the site with only a friend, who was probably a faster runner anyway.

The plane's engine currently sits next to one of the wings. Unfortunately time, the elements, and vandalism have taken their toll on the remains, leaving an empty shell sitting on huge moss and tundra covered boulders. Even the



View a short video clip of a curious Beluga whale mugging for the camera (click on the image below to watch)



Video shows divers snorkeling with a large group of Belugas (click on the image at left to watch); Prince of Wales Fort is being fully renovated (below)

must have looked like we were trolling for belugas, or maybe polar bears.

It wasn't long before a pod came to investigate. A few at first, but then more and more became curious. Soon, they were everywhere. The two in the water were making as much noise as the belugas. Not sure who was more excited...

Soon, it was my turn. I tried to enter without making any noise and found the surface temperature to be quite warm, maybe low 40's, compared to my scuba visit. With the sun shining and no wind on the horizon, it was turning out to be a great day, especially when the belugas came to check me out.

instruments where the pilots once sat have disappeared.

After photographing the crash site, I began looking around for what flowers there might be and discovered some tiny orchids only a few millimeters high next to a puddle of water on one of the boulders. How easy it is to miss these rare delights.

Snorkeling with Belugas

Before my journey ended Wally took me and a couple of his new guides out to snorkel with the belugas. All equipment

was provided, including a quick douse of mosquito spray. Speaking of mosquitoes, and if you plan to travel with your own snorkel, the type that works best are the dry snorkels because the bugs can't be sucked in.

I'm not sure but I believe we were once again in Button Bay where Rob and I did one of our first boat dives with the belugas. The two guides donned their dry suits and snorkeling gear and entered the water. Wally had them hold onto a pole in the water, as he slowly pulled them with the boat. From a distance, it

Rather than holding onto the pole, I hooked my leg over it and was pulled backwards, keeping my hands free to work the camera controls. Strobes were

glow underwater.

It also seemed that they liked to position themselves directly under snorkelers just out of reach and turn their white undersides up to watch. Forty-five minutes passed like seconds, and not once did they make an aggressive move or seem afraid of us in any way. They just liked following the boat and probably laughing at the funny looking critters or "lures" being pulled behind it.

Topside attractions

Two other excursions not to miss when visiting Churchill are a visit to the Prince of Wales Fort National Historic Site and a trip out to the wreck of the *Ithaca*. The fort is located across the river from town. History states the fortress took the Hudson's Bay Company around 40 years to build, starting in 1731.

Currently, the Fort is undergoing massive renovations. Original iron cannons now lay on the ground in a row just outside the main entry, wait-

ing to be remounted on the walls.

The wreck of the *Ithaca* is a bit of a drive but fun to check out. In 1961, the cargo vessel was caught in a high wind-storm and washed ashore at Bird Cove. There it remained, sitting upright and exposed to the elements.

During my last visit, Rob and I walked out for closer examination, but at that time Rob was packing a big bear rifle. On this trip, the group decided not to tempt fate for a closer look at the rusting hulk.

On the way out to the *Ithaca*, you might get a chance to stop and visit a local dog musher's team. During the winter, some of the dogs are used for sled rides and others for racing. During our tour, the guide said he had heard stories from the caretakers who arrived to occasionally find the dogs playing with polar bears!

On the way back to town, our guide showed us where the Akjuit Aerospace was and the Churchill Northern Studies Centre. He also explained that the Churchill Research Range had 3,500 launches in its 28-year history through 1989.



Churchill



LEFT TO RIGHT: Wreckage of the *MV Ithaca*; The staff of Winnipeg's Tall Grass Prairie Bread Company show off yummy baked goodies; Old St. Boniface City Hall in the French Quarter of Winnipeg. BOTTOM LEFT: St. Boniface Museum in the French Quarter of Winnipeg

Overall I found my journey to Churchill quite rewarding for the activities one can participate in. My stay at the Lazy Bear Lodge was first-rate, and I thought the rustic log construction fit right in. The diners in their restaurant were exceptional, especially the evening specials. Their daily breakfast buffets on the other hand could use more variety.

What to Bring

Summer visitors to Churchill might want to

pack some quality bug spray, sun block, a sun hat and mosquito netting, if one is planning any hikes. I brought my dive mask (prescription lenses) and my snorkel and fins.

Words of Wisdom

I did find out about condensation in my camera housing the hard way. With topside temperatures hovering between 21-26°C (70-80°F) on a sunny day and water temperatures between 0-4.4°C (32-40°F), condensation tends to build up on the dome port of the housing. To avoid this, I placed my housing (with camera inside) into a bin or bucket of cold ocean water while still at the dock, and covered it with a wet towel to keep it out of the sun.

Winnipeg Stopover

This is a city not to miss if you want the full Manitoba package. Whether you travel by air or rail, the cosmopolitan city of Winnipeg is where you will

depart from and return to for a trip to Churchill. As I mentioned earlier, I chose to fly into Churchill, so

I could enjoy a few days in Winnipeg to relax and explore some of the city's cultural diversity.

During my brief stint, I stayed at The Forks, a Natural Historic Site of Canada located at the junction of the Red and Assiniboine Rivers. This was once a meeting place where aboriginal tribes once met, dating back to over 3000 years. Today, it is a site filled with unique shops, restaurants, community events and self-guided tours.

Across the Esplanade Reil bridge is the French Quarter and home to St. Boniface, one of the oldest areas in Winnipeg. The other direction leads into downtown Winnipeg and the East Exchange District where the Manitoba Museum is located.

A new permanent exhibit is now open in the museum called *Ancient Seas*, creating an aquarium-like atmosphere with sound, video and multi-layered 3-D animation. This unique gaze back in time takes a look at prehistoric marine Manitoba, including Churchill when it was submerged under a tropical sea of

the Ordovician Period, 450 million years ago. www.manitobamuseum.ca

For more information about traveling to Winnipeg, visit the following links:

Tourism Winnipeg

www.destinationwinnipeg.ca

Tourisme Reil

www.tourismereil.com

Inn at the Forks

www.innforks.com

Churchill Travel Links

Churchill Chamber of Commerce

www.churchill.ca

Parks Canada

www.pc.gc.ca

Travel Manitoba

www.everythingchurchill.com

Via Rail

www.viarail.ca

Calm Air

www.calmair.com

Lazy Bear Lodge

www.lazybearlodge.com ■



VIA Rail train transports guests in style to Churchill from Winnipeg