

Fossils go Fossil Hunting - August 2014



There was a full moon glowing when we arrived at Namew Lake in remote northern Saskatchewan. No, wait, that's me. Speedboat Doug landed in his floatplane, Frank flew his Piper into the homemade strip slashed out of the jungle, and Ol' Griz and I arrived in a rented boat. It wasn't supposed to be a rental but more on that humorous tale later.



We were here to do a fossil survey. When I last flew in...three to four years ago (more on this later too)...with Frank to his cabin I was flabbergasted upon landing to see fossils everywhere on the limestone ledges surrounding the lake! He hadn't told me about them! His cabin was a boat ride away and there the beach was disappointingly pebbly.

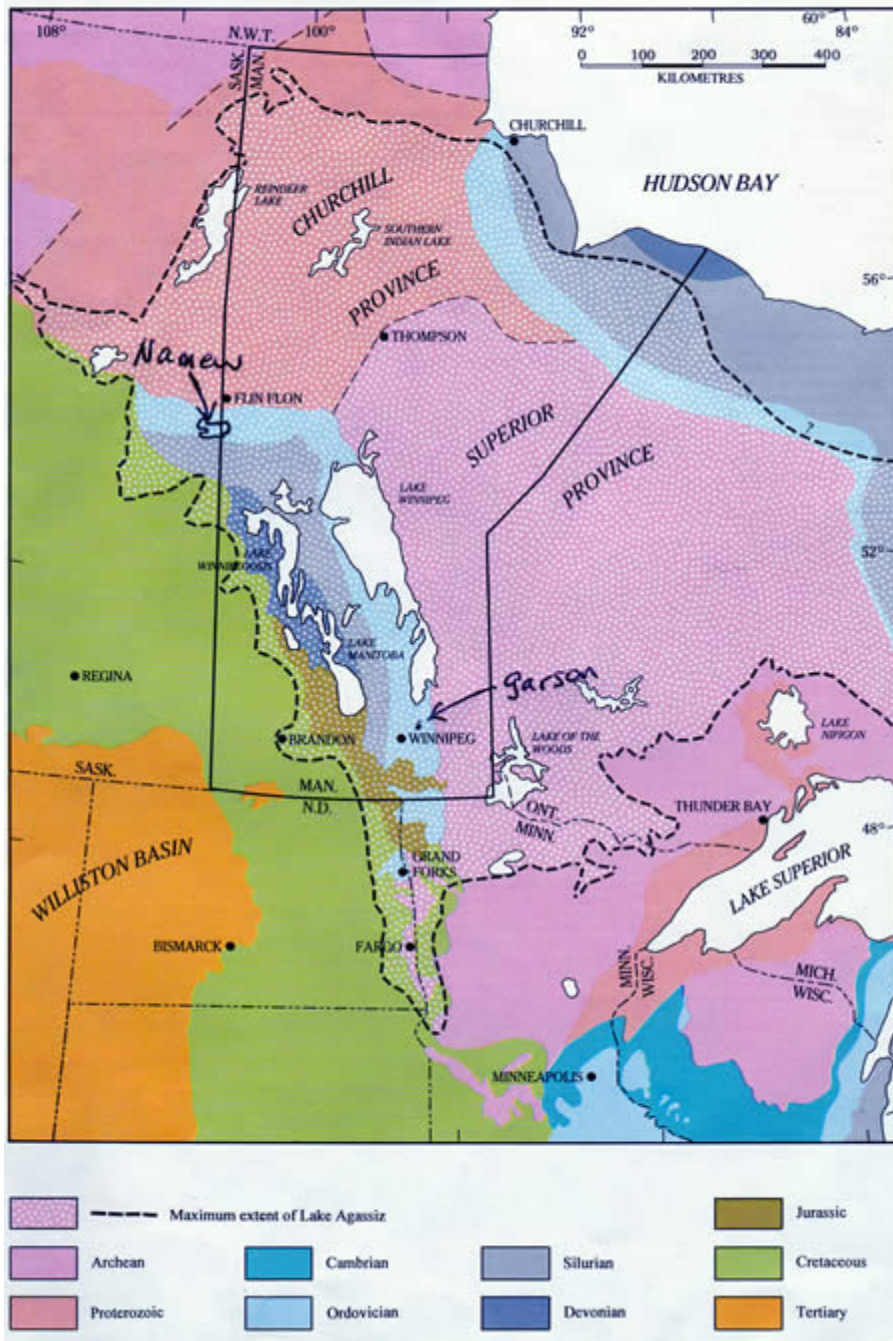


One of the few pieces I found was this remarkable specimen. Not only was it freckled with fossils but, because of its natural shape as an axe, an early native had tried to knap the edge! But, seeing limestone is too soft for that purpose, abandoned it. I swore I would return to do a survey.



And return I did after doing my homework. Fossils of this sort are exceedingly rare in Saskatchewan. Namew is on the old fur trade Voyageur highway just north of Cumberland House on the Saskatchewan River and the old explorers and fur traders would have hated it. It's about 13 miles long by over four wide and you can count all the islands on one hand, if you're missing more fingers than even Frank (one paw is useless for hitchhiking). Any kind of wind and it turns into a cauldron. Unlike the rest of the "highway" that goes through Canadian Shield, Namew is on a tongue of Ordovician period limestone that licks in from Manitoba.

BEDROCK GEOLOGY OF GLACIAL LAKE AGASSIZ



It's the light blue strip that turns south and sweeps down past and including Winnipeg. Just to the northeast is Garson, home of the century old Tyndall stone quarries.



They produce a famous stone in Canada used in everything from our Parliament Building in Ottawa to institutions and buildings everywhere.



Closer to home they form the foundation layer of Toontown's iconic Bessborough Hotel, just across the river from our place. The stone is used widely in the city's downtown and it's loaded with fossils. Indeed, that's where I started my fossil hunt.





Formerly Eatons. Note the white fossils in the upper right. There's at least 20 buildings downtown made of Tyndall.



That's a nautiloid in the upper right. The dark, splotchy pattern was formed by some kind of unknown aquatic wormlike animal, the burrows filling in and fossilizing and giving Tyndall stone its trademark look.





The Limestone that stretches up from Garson to Namew is Ordovician and bloody old. To put things in perspective here's a simplified geological chart:

Quaternary – Last 2 million years, time of the Ice Ages

Tertiary – Age of Mammals

Cretaceous – Age of Dinos, til the asteroid hit Mexico 65 million years ago ruining their seista

Jurassic – Same

Triassic – Same

Permian – Noted for the greatest of all extinction events

Carboniferous – When the great coal fields were laid down

Devonian – Age of Fish, when the oil fields were laid down

Silurian – The first animals crawled onto land

ORDOVICIAN – 488-443 million years ago. Near the end, the first plants were believed to be taking root on land

Cambrian – 541-485 million years ago, the first explosion of life able to be fossilized, as made famous at Burgess Shale in British Columbia

And then we're into the Pre-Cambrian 500,000,000 years ago when life was at the microbe level. So the Ordovician is old old!



North America was then at the bottom of a shallow ocean and the continents didn't look anything like they do today. Indeed, North America was closer to the equator and Africa was slamming into the eastern seaboard, ramming up the Appalachians to Himalayan heights.



Finally, after "three of four years" away, I organized a team to return. Both Speedboat Doug and Ol' Griz had been on my Red Deer dino bone expedition. I should have seen problems ahead when I saw Ol' Griz's ancient boat, the paint peeling....



The long drive north was partly over gravel roads and all through the bush. Griz stopped in The Pas, Manitoba, to stock up on supplies. He serves as my fashion advisor.



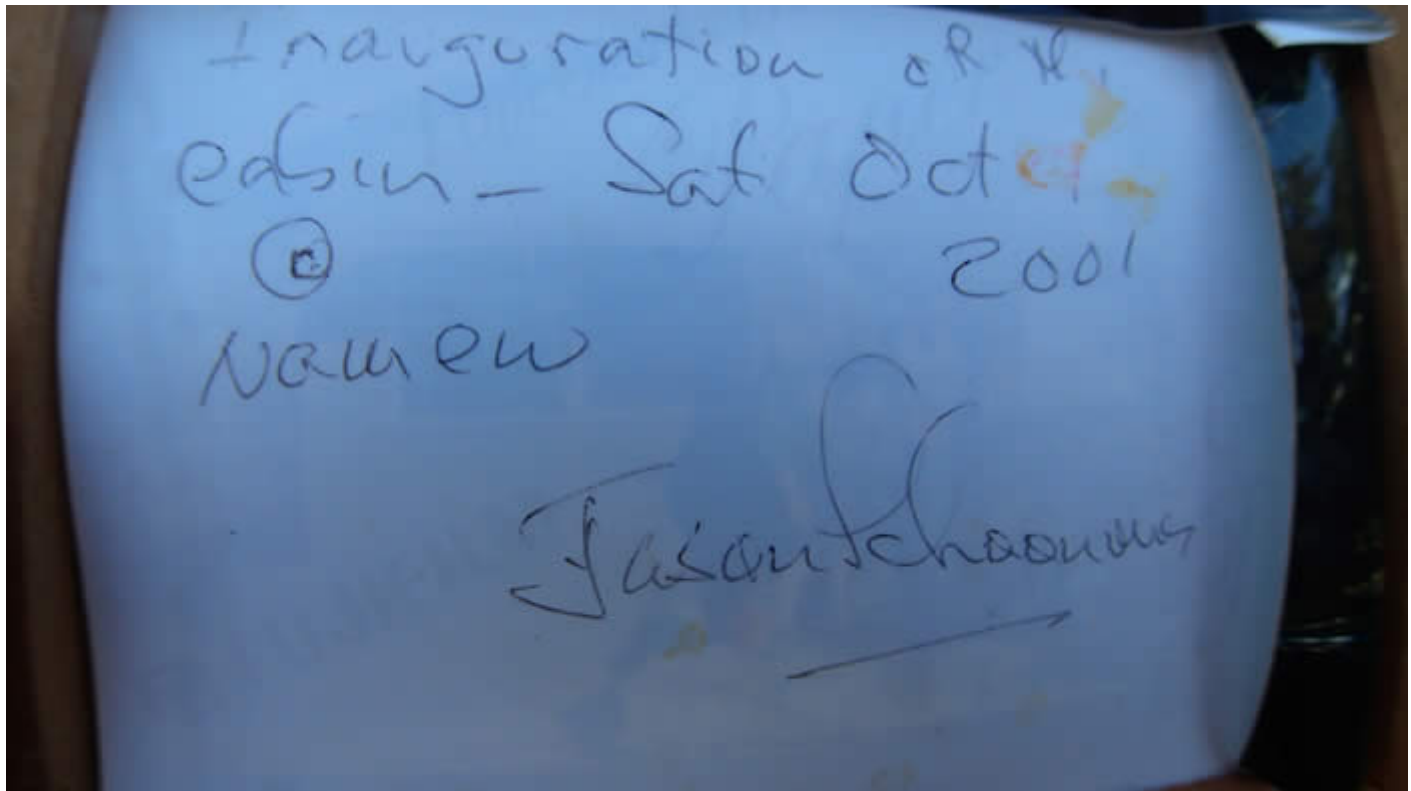
Once at Sturgeon Landing, the put in, we loaded up the boat with the expedition's supplies - there was barely enough room for us - and fired up the engine. But when he tried to push the throttle forward it was jammed in neutral. An hour later as we (well, he) were trying to piece the thing together we discovered that we were sinking! The boat was rotting out. Good thing we didn't get out on the lake. Thus, the rental.



But we spent a hilarious evening up until midnight sipping Scotch and cracking jokes at his expense. My suggestion was that he sell the boat to a cruise liner as an anchor. Fortunately Ol' Griz is noted for his easy going nature, he laughs.



It was that same evening I got the shock of my life. Now, I'd been telling everyone it had been "three to four years" since Frank and I last flew up to his cabin. At that time I shot this picture of him and his buddy Ted, his partner in the cabin and one they had just purchased. It was an inauguration picture, with the two of them pretending to swig from whisky bottles (or were they pretending...?). I had framed it and dropped it off at Frank's farm in Carrot River on a later visit.



Flipping the picture over I was stunned to see that it wasn't "three to four years" - but rather THIRTEEN YEARS! It was just after I had returned from New York, and just two weeks after the Twin Towers came down! Either my mind is going...or, and I prefer to think this is the case, those fossils left such an indelible impression on me it only *seemed* like three to four years....



Anyway, with two boats, we started our survey. We had three full days to cover the lake. That's bush pilot legend Walter Johnston's cabin he built in the '50s, Frank's dad-in-law.



We'd land and spread out in the either direction, walking the ledges.









Sometimes the stacked ledges reminded me of seating in Roman colosseums. The fishing, incidentally, was incredible, despite it being August and normally a time they're not biting. Inside of a half hour we'd always have our fill of walleye for the evening and, boy, do they taste great coming out of a clear limestone lake..



And did we find fossils? You betcha. All trace fossils, the kind that leave impressions.



These half moon tracks were everywhere, in all directions.



I suspected horseshoe crabs were the culprits but upon investigation, they make a very different track. But they were around then, one of the few species with that kind of longevity.



These were common as well, molds of a colonial coral, probably *Palaeophyllum* according to Dr. Graham Young, Curator of Geology and Paleontology at The Manitoba Museum. I had sent photos to Denis St.-Onge, emeritus senior scientist at the Geological Survey of Canada and a fellow Explorers Club member and friend, and he had routed them to colleagues who specialize in this period. Another mold is below..



But - by far - the most common fossil we found were nautiloids and we found at least 100 of them. Graham says it's a cephalod siphuncle, possible of *Armenoceras*.





They're cephalopods, related to squid and octopi and were probably the major predator of the time.



Note the "wings" on this one.





Their only living descendent is the beautiful chambered nautilus and, it, sadly, is under seige because of its beauty. I remember being on assignment for Filipino Tourism in 1985 and I was at one of their top resorts, Tambuli near Cebu, to do a scuba diving story and we enjoyed sipping cocktails from them in the outdoor lounge.



99% of all species that ever lived are extinct so for something to survive through so many mass extinctions is impressive. They're living fossils. Most living species last only a few million years. Dinos, like T-rex, ran their course in under two million. Mammal species last a million years and rarely over 10 million and the way we're going, racing headlong like lemmings this century towards the cliff, we won't make that. We're speeding towards a major meltdown, to mix metaphors, but we're an incredibly adaptable species so some will survive to rummage through the garbage and poisoned air, at least for awhile. And after we're too extinct Nature will recover and move on in her ineffably creative manner and we'll just be one of her more interesting, if infinitely destructive, experiments. We're such a quixotic blend of intelligence and utter stupidity. In the meantime, before the coprolite hits the fan, I'm going to enjoy it.



We surveyed 80% of the lake. The north shore was rocky, not conducive to a search. Likewise, the channel that reached down towards Cumberland House, the route of the old fur traders, was largely broken up into rocks too. Only one stretch for a quarter of a mile was rich - and boy was it so. It was the reach opposite Frank's cabin, on the northwest side of the peninsula.. It was easy to imagine one was walking over the bottom of an ancient sea. Loose fossils, however, were rare. This one has a nautiloid running along the top.



And I found this water worn pebble on Frank's beach with the remains of a receptaculite. It's nicknamed the sunflower coral but no one knows if it was a coral or an algal mass. It's extinct too.



One as seen on the Federal Building in Saskatoon. The surprise was how few different species we found. Nautiloids predominated, although the Ordovician saw a radiation from the profusion of the Cambrian. Another mystery, but life is full of them and it's the curiosity to learn how it all works that is so much fun to seek out. I wasn't disappointed at all, but rather satisfied. I now, after, uh, three to four years of impatiently waiting, had Namew cased.



The living fossils! Next - the north face of Everest in Tibet and you can bet I'll be watching for fossils there too.