## Knowing stuff helps **Tethering kayaks anecdotes**

On 16th September 2023 the collapse of the side of a 1,200 metre high peak in northeastern Greenland sent a massive rock landslide tumbling down into Dickson Fjord. Crashing into the sea, at 90° to the axis of the fjord, the collapse is thought to have initially created an initial pressure wave (tsunami) of up to 200 metres in height, which, within minutes, settled down to seven metres. The subsequent wave sloshing generated seismic waves that were recorded over the next week in a host of worldwide seismic recording stations:

https://www.theguardian.com/environment/2024/sep/12/entireearth-vibrated-climate-triggered-mega-tsunami

With no tour boats or paddlers in the fjord at the time, it took 68 scientists from 40 institutions in 15 countries almost a year to solve the Miss Terry (mystery) of what triggered the seismic waves. Before and after photographs of the 16th September rock collapse show up to 25 million cubic metres of rock crashed into the fjord. The cause, sadly, is global warming and the retreat of a valley glacier's weight against the rock face.

Reading this Dickson Fjord tsunami story reminded me of two paddling tsunami stories, not nearly of the same scale, and also two historical incidents, all of which emphasize the importance of leashing (tethering) your kayak when landing, on land or on ice, always!

## **Prince William Sound**

When my expedition paddling mate Conrad and I were in Prince William Sound we had launched from Whittier and spent a marvellous morning, high on a rock headland, watching a sustained calving event in Blackstone Bay. Later that evening at the head of Barry Arm we landed on a sandy camping beach, just shy where of three tidewater glaciers calved into the arm.

This sandy beach offered superb tent sites just above the high water mark; however, we were both very aware of pressure waves generated during glacier calving events. Despite the beach offering a great spot to put the tent up, we instead set up the tent about 10 metres higher on a glacially scoured granite knoll but with excellent views of the calving glaciers. We carried our kayaks close by, tied up to small bits of shrubbery.

After dinner we watched a group of paddlers from the Lower 48 land on the enticing sandy beach. They left their boats just above tide level and set tents up. The boys then joined Conrad and me sitting on a granite knoll, from where we could observe the beach and the stretch of rocky shoreline around to the calving glaciers.

Obviously well pleased to have arrived at this 'sheltered beach', this



Conrad Edwards watching for calving events from the massive front of the Barry Glacier.



A huge calving event from the Barry Glacier with the initial bulge of the sea clearly visible.

rowdy team of blokes celebrated their safe arrival with a bottle of cognac, which we sampled, and huge cigar shaped joints, which we didn't sample. Their dress standards, denim jeans and T shirts, suggested this could well be their very first group paddle into the calving glacier country of Prince William Sound.

After setting up their dome tents close to the high tide mark, the boys joined us on the bare granite knoll, patiently watching and waiting for a calving event from the big one, Barry Glacier.

Patience was soon rewarded with a huge calving event that was observed by all, not just a single towering icy serac but a long section of the glacier front. Generation of a biggish potential tsunami wave was obvious by the upthrusting of a dome shaped pressure wave, a big bulge in the sea surface under the glacier front.

It was this tsnuami that created havoc with tents and kayaks on the beach.

Conrad and I didn't say a word. We didn't need to. We knew a rather good tsunami would roll in to the lovely, sandy, camping beach where the boys from the Lower 48 had pitched their tents and had their kayaks (untethered) just above the high water mark.

Just like a slow motion movie, we knew exactly what could transpire as the boys passed the joint around and slugged on the bottle of cognac as the initial tsunami wave developed.

'Tis a matter of sea depth versus wavelength as to how high a tsunami can develop, in deep water just a matter of centimetres in height but in shallow water powerful breaking waves can develop, like the recent mountain collapse in Dickson Fjord, initially gauged at up to 200 metres high.

That initial seismic wave rolled around the rocky shore to where we were perched, rolling around our solid granite headland into the shallows of the sandy bay, where it reared up into a series of powerful breaking surf waves.

Whether it was ignorance, the happy baccy or the cognac, the boys