The Osteometric Board

In the mid-1990s, Glenn Sheehan, Greg Reinhardt and I got a grant to excavate a site in North Alaska, on Point Franklin, named Pingusugruk. We had surveyed the site in 1986 for the US Fish and Wildlife Service, who were managing the area at the time as part of the Alaska Maritime National Wildlife refuge. Since then, the refuge has been reduced in size and the land turned over to BLM to manage. It was an interesting site, and the people of Wainwright encouraged us to come back and do an excavation. We got funding from NSF, and back we went.

We had a fairly big crew, lots of gear and a pretty complete field library, since the site is remote and we were going in via Twin Otter. We had no interest in excavating graves, and had seen no sign of them during the survey. The only human remains anyone knew of from the site was one skull that had been on the ocean beach for some years (far away from the houses we planned to excavate). It acquired the reputation of whistling at passersby, and had been removed to Fairbanks by Fred Milan at the request of Wainwright people many years before. I believe it has subsequently been repatriated and reburied. As a result, we did not bring any osteometric equipment.
So there we were, happily excavating the tunnel of a semi-subterranean house, when someone encountered some long dark hair. We decided we needed to be sure what we had before going to talk to the Wainwright Elders, so we excavated a little more and discovered it was a musk-ox skin. Great relief. Excavation proceeded.

A couple days later, a bit more long dark hair was exposed, but this time it was next to a human cranium. We stopped work, and one of us headed down the coast on our only ATV 30+ miles to Wainwright. After discussion with the people of Wainwright, it was decided that we should continue the excavation, since that part of the site was eroding quickly and the person could wind up in the ocean during the next big storm. We were to record and document as much as we could, but the individual was not to be taken off site, and instead reburied on Point Franklin at a location which did not seem to be eroding. So we continued the excavation. The individual was lying wrapped in a musk-ox skin in the lower of two entrance tunnels to a house which had been rebuilt. We recorded everything in minute detail. It took my brother John (who is an excellent field archaeologist even if he is an MFA in Landscape Painting) and I nearly a day to shoot the human remains in, with John lying on frozen ground most of the time to hold the peanut prism. Then we needed to document the individual.

Well, we all had taken human osteology, and I am a zooarchaeologist, so I’ve measured a lot of bone and so had Greg. We had copies of von den Driesch and Bass in the field library, and I had a pair of calipers (standard dial calipers I’d bought in Copenhagen), but they weren’t nearly big enough to do measurements on long bones. What we needed was an osteometric board. And we didn’t have one.

Fortunately Greg Reinhardt is a very handy guy, and we had hand tools, and fasteners. Wood, not so much, but Point Franklin catches a lot of driftwood. A bit of cruising the beach and Greg had several nice boards, including a 1×6. He cut an end off, made a solid wall held at a right angle with two corners sawn from another board (to get the 90 degrees) and sacrificed one of our tapes. It was attached and fastened down so we could measure up to about 55 cm, which seemed like enough. He folded up the rest of the tape instead of cutting it off, just in case we needed to salvage it later. He then made a second sliding board with right angle supports. Greg and I hauled out the books, and spent hours in the supply tent out of the wind, with Greg taking measurements and me recording them. We were able to tell that the individual was a woman, based on the shape of the pelvis, her worn teeth (from chewing hides) and other features. She was quite small.
After we were done, we had to arrange a reburial. The first thing was a coffin, which we obviously didn’t have among our field gear either. Greg had found enough boards to build a coffin for the small woman, but we had nothing to line it with. John had a towel he had apparently been saving so he’d have a clean one for his first shower when he got out of the field, which he nobly donated to the cause. We let the community know, and all three pastors came up by boat, along with about half of the other inhabitants, and a fine solemn funeral was held. It might have been her first, because people were not buried in entrance tunnels. We wondered if she had crawled into the tunnel of an abandoned house for shelter while traveling, or been left there by companions needing to press on or die themselves. It is highly unlikely anyone knew she was there when the house was rebuilt, because sand had built up over the years, and the upper tunnel to the upper house never got that deep. Traditionally people avoided dead bodies, and the idea that people were knowingly crawling over one every time they went in or out of the house seems pretty unlikely.

The board is still on the North Slope, and has even been used on a couple of other projects. The sliding part has disappeared along the way, though. I don’t use it anymore, though. When we started the Nuvuk Archaeology Project, which involves excavating a large eroding ancient Thule cemetery (I am actually not interested in mortuary archaeology and would be quite happy if I never excavated another grave; I just keep working on eroding sites where one of the things that is eroding is graves, and people don’t want their ancestors falling in the ocean), we bought a good bit of very nice osteometric equipment, including all sorts of calipers, and a very nice folding osteometric board. The old board from Pingusugruk is now an artifact itself, part of the history of archaeology on the North Slope.
I'm an Arctic archaeologist living in Barrow, Alaska. I excavate at the Nuvuk site, and I have a garden. Both are the northernmost in the US. I blog at http://iceandtime.wordpress.com and http://tundragarden.wordpress.com. View all posts by Anne Jensen →