

Hornby Island Yields Amazing Fossil Bones

Betty Franklin and Dan Bowen

The VIPS members have been very active over the winter months with some great finds on the local rivers. Our first trip in March to Hornby Island was so rewarding for the 16 participants that a smaller group decided to go again in April! The group of Garry Howell, Betty Franklin, Mike Inglin, Russ Ball, Skippy Miller and new member Jim Wood and guest Jo-ann Boettger were doing well and had found *Archaeopus* crabs, fragments of large *Diplomoceras*, and other ammonites. Betty who has collected on Hornby for 15 years was about to make the fossil discovery of her life. She was just about to take a break when there in a tidal pool was what appeared to be bone; not one, but a string of articulated vertebrae. She rubbed her eyes in somewhat disbelief, "No it can't be!"

Betty's story; Yes, it was a perfect morning to follow the tide out on Hornby Island. Mike Inglin and I were thinking of having lunch back at the truck and going to the next beach access. We were fossiling our way up the beach when I noticed some bonelike material, about six feet ahead. I'm skeptical, and anyway there are two concretions at my feet. I stop and do some cracking, look over again, and yes! It was bone, three large vertebrae! Upon closer inspection, there were five vertebrae exposed. I started moving gravel and Mike sees I'm into something and starts to help me, and within seconds we have uncovered eight. Reality sets in.

The rest of the group arrived and in no time we have uncovered a series of concretions: 36" of the spinal column with eight vertebrae exposed and four more embedded, three ribs and some miscellaneous other bone material. We experience a huge rush of excitement. Luckily, Jo-ann has her camera and we document the site and the action. We also take the time to draw out a site plan, noting the orientation of the specimen and position of each concretion. We also removed the concretions and wrapped and labeled each one.



VIPS group, Betty Franklin with one concretion, Mike Inglin, Jim Wood, Skippy Miller, Garry Howell and Russ Ball. Photo by Jo-ann Boettger.



Mosasaur vertebrae in situ. Photo By Jo-ann Boettger.

The next day Mike Trask and one of us (DB) went to Betty's to see what she had. Clearly we noted the convex terminus on one end of the vertebrae, classic Mosasaurus. With no skull information, the size of the vertebrae is all we have to go by. The only experience we have is the 22 vertebrae we found on the Puntledge River from the medium-sized mosasaur, *Platacarpus*, tentatively identified by Betsy Nichols. Also from the Puntledge River has come the amazing new genus and species, *Kourisodon puntledgensis*, that we all helped dig out over several years. We have also seen the *Tylosaurus* material Graham Beard found on Hornby.

Was there more material hidden beneath the shale? We had to go back to check. The next day, nine VIPS members returned to the site for further collecting and

documentation. Much to our disappointment, we only found a few small bones. Some of us believe, that based on the direction of the vertebrae, there could be more material to be found.

Based on the size of the vertebrae, the mosasaur appears to be similar to *Platecarpus* or *Tylosaurus*. We will have to expose more of the bone to better determine what we have. The vertebrae were lying sideways in the concretion so the neural spines are preserved. The one exposed neural spine is 15 cm long and a number of visible ribs are from 12 to 30 cm in length.

Judging by the quality of the fossil bone material, the preparation should produce a spectacular specimen. Betty will allow the vertebrae to be used for educational purposes and for VIPS events.



Mosasaur vertebrae. Photo by Dan Bowen.