

Birth of an Age

With the impending demise of the Elliot Site becoming apparent during the final days of the dig in July 2005, a new dinosaur hunting ground had become a priority for the Queensland Museum and Australian Age of Dinosaurs dig team and the question on everyone's mind was, "Where are we going to dig next?" It was a question that soon had an answer in the form of a box full of dinosaur bone dumped unceremoniously on a table in the Belmont woolshed: Dave and Judy Elliott had found a new site!



THE DINOSAUR JIGSAW PUZZLE Story by Paul Tierney Break out the jackhammer, we've found another dinosaur

While mustering sheep in March 2005, Dave had stumbled across a pile of rocks on the ground with a nice little sauropod dinosaur finger bone (metacarpal) half buried among them. Little is probably a bit of an understatement as it was a third of a metre long! Being rather excited by this find, the Elliotts quickly took a photograph of the bone, attached the photo to an email with the unique title of "Ho Hum, yawn" and promptly dispatched it to Queensland Museum palaeontologist Scott Hocknull. Scott's reply of "Alright Elliott, you little #%&\$, where did you find it?" did not disappoint Dave and Judy and thus was born the Ho Hum Site; a new hunting ground, and what a hunting ground it would prove to be!

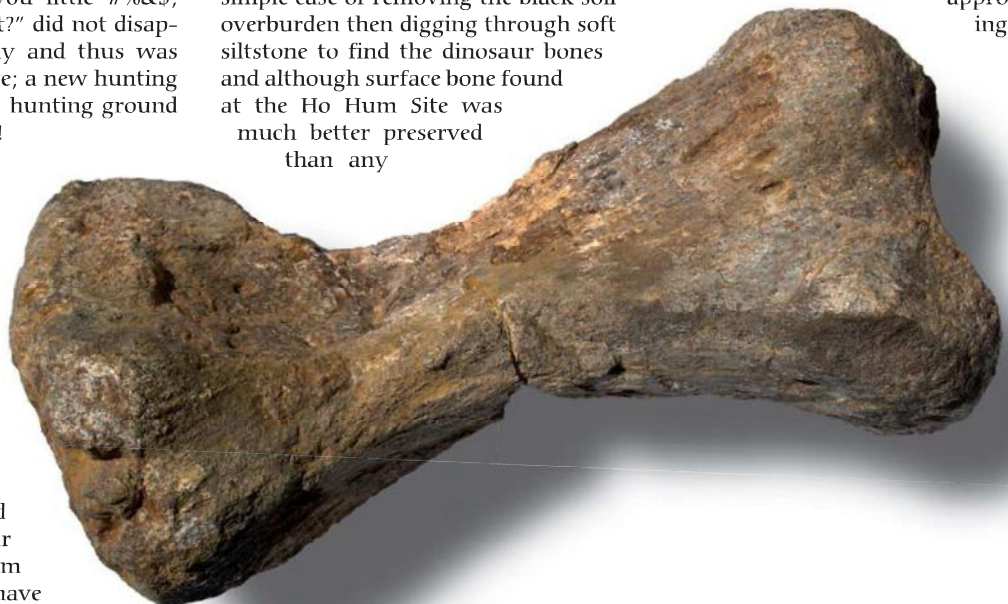
The Queensland Museum's reaction to this new site was one of sheer disbelief in the fact that yet another dinosaur site had been found on the same property. Arriving on Belmont in 2001 and being confronted by boxes and chunks of dinosaur bone on a dining room table, they couldn't have

imagined that four years later they would be so gobsmacked at the rate of which new dinosaur sites were being found. It was as though they were experiencing the same overwhelming feelings that the first dinosaur hunters must have felt during the heyday of dinosaur discoveries in North America more than 130 years ago.

Ho Hum Site is about 5km from the Elliot Site and is part of the Winton Formation, but that is where any similarities with the Elliot Site ends. Digging at the Elliot Site had been a simple case of removing the black soil overburden then digging through soft siltstone to find the dinosaur bones and although surface bone found at the Ho Hum Site was much better preserved than any

of the other sites on Belmont, Ho Hum soon proved that it wasn't going to give them up without a fight. This we discovered during the last two days of the Elliot Dig in July 2005 when we decided to have a reconnaissance dig at the Ho Hum Site to determine what was below the surface and just how good the site was.

The little rock pile that had produced the chunks of bone found by Dave and Judy back in March quickly became somewhat larger then first thought and approaching the





The search is on for surface bone fragments as a group of volunteers comb the Ho Hum Site in July 2005 (left and above). A full scale dig was held eight weeks later where it was discovered that the bone bed was actually a very large siltstone concretion lying just below the surface of the black soil (below). This site was discovered in March 2005 when Dave and Judy Elliott found the hand bone (bottom left) of a large sauropod dinosaur while mustering sheep on their property.

Photos, D. and J. Elliott

fossil outcrop from the northern side with Dave's front end loader, it soon became apparent that we were up against an enormous shelf of solid rock. A siltstone concretion to be exact; a fine-grained 98-million-year-old silt deposit that had hardened into concrete! What were we going to do now? This rock was too hard to go through, too big to go under and much too heavy to move. There was only one option left; we were just going to have to go around it!

The dig volunteers rapidly set about exposing the front end of this peculiar concretion and while digging into the surrounding sediment found two large but incomplete tail vertebrae lying side by side. These tail vertebrae were anterior dorsal vertebrae, which means they come from the base of the tail; but not just any tail! These were from the tail of a very large sauropod dinosaur. It was more than a little intriguing to find these two similar-sized tail vertebrae sitting side by side in soft siltstone beside a great chunk of apparently bone-free rock. Were the bones in this soft dino-dirt just a freak occurrence or were there more bones lying under the rock itself? Just what role did this monstrous monolith have to play?

The answers to these questions were not long in coming when a couple of fist-sized fragments were split open to see if they contained anything of importance. The first revealed nothing

and while the second did contain a small fleck of bone, it was nothing substantial. Feeling more confident that the rock did not contain substantial amounts of bone, we prised two more pieces from the shelf just to make sure. It was about this time that things suddenly changed; the interior of the loose blocks that had just been exposed were absolutely packed with bone! Further rock cracking soon proved that not only was our boulder saturated with bones, it was also littered with cracks that had, over time, been filled with gypsum and ironstone, obscuring the typical textures found in bone. This made identifying bone in the rock almost impossible without attacking it with a hammer. With this new problem to ponder, the dig reached its exasperating conclusion. Packing up our equipment, we covered the site with plastic, hessian and dirt and returned to our respective homelands to plan our next assault.

With a team of 12 volunteer diggers kindly provided by Monica Yeung of Gondwana Dreaming (an eco-tour group) from Canberra and several staff members from the Queensland Museum and Australian Age of Dinosaurs, the Ho Hum Dig got under way in earnest in early September 2005. Our experience in June had made it quite clear that this wasn't going to be one of those everyday easy digs and with the plastic, hessian and dirt removed, our team



commenced work on exposing the siltstone boulder to determine just how big it was. The usual method of removing the black soil overburden with a front end loader wasn't going to work this time due to our stony friend only inches below and so we were forced to rely heavily on a Dingo mini-digger, a mini excavator (my favourite) and shovels. The pile of rocks on the surface soon took the shape of a huge boulder some three to four metres wide, 10 metres long, one metre thick, dipping downwards from north to south, surrounded by soft siltstone and jam packed full of dinosaur bones. Could this block of rock entomb an articulated dinosaur?

It didn't take long before we started to uncover bones; first with the dis-

covery of partial ribs followed by an incomplete (a little more so after I scraped a bit off with the mini excavator) metacarpal from what appeared to be the same large dinosaur that owned the tail vertebrae discovered in June. As the subsoil was removed and more of the ribs were exposed, it became apparent that some of them were in fact running into the rock, thus proving that the large siltstone concretion that had formed around them since their fossilisation had not yet managed to encompass the whole bone. Indeed, by the end of the dig we were to find one very large rib running into one side of the rock and promptly curving and running back out again, a trick that made it impossible to remove without damaging it.

By now, we had all realised that washing the rocks made it easier to distinguish bone from rock, but with this realisation came a new problem. Before each rock was removed, it was necessary to number it and mark where it joined other rocks so as to maintain its association with its neighbours. Washing the rock to enable the identification of bone also tended to wash off some of the marks. The commencement of this activity just happened to coincide with the arrival of our second group of dig participants; a dynamic group of people from far and wide including a couple from New Zealand who had no idea what they'd let themselves in for. The Ho Hum Dig soon became a 'humdrum' dig for many of them

