

Piecing together a prehistoric puzzle

‘Stars’ of natural history museum set to awe public from tomorrow

By **AUDREY TAN**

PERCHED on its hind legs at the centre of the Lee Kong Chian Natural History Museum, Twinky the dinosaur has been immortalised with its front limbs in the air and its head lifted high, as though mid-way through a hearty meal of leaves and buds.

At 12m in length, it is the smallest of the trio of diplodocid sauropod dinosaurs at the new museum in Kent Ridge, which the public can visit from tomorrow.

Next to Twinky is graceful Apollonia, its 24m-long frame reaching up to overlook the museum’s mezzanine.

Then there is Prince, all 27m of “alpha” male, stretched in a seemingly lazy manner across the centre of the 2,000 sq m exhibition space.

Their easy poses belie the efforts of a team of almost 30 museum staff, professional art movers and dinosaur experts to set up the exhibit – the star attraction of

Singapore’s first and only natural history museum.

Research associate Martyn Low, 33, said it took the team two weeks of 12-hour days last August to assemble the fossils of the three giants, which arrived in Singapore in 53 crates between 2012 and 2013.

There were more than 1,000 elements to the three 150-million-year-old skeletons, with some bones weighing more than 200kg. The heaviest was the sacrum (the pelvis and the bones fused to it).

It was the first piece to be mounted on each of the three frames, with the help of a chain block and two “spidermen” – professional art movers trained to walk on the frame, said project manager Tan Swee Hee, 43.

Due to its weight, getting the sacrum positioned was a challenging task. “But once the sacrum was in place, the vertebrae and tail grew from both ends very quickly,” Mr Low said.

The work was as challenging administratively, as it was physically. “Every single bone needed to

be kept track of, as each one is an asset,” said Mr Low.

The dinosaurs were acquired for about \$8 million in 2011 from Dinosauria International, a Wyoming-based fossil company that found the remains between 2007 and 2010 in Ten Sleep, a town in the American state.

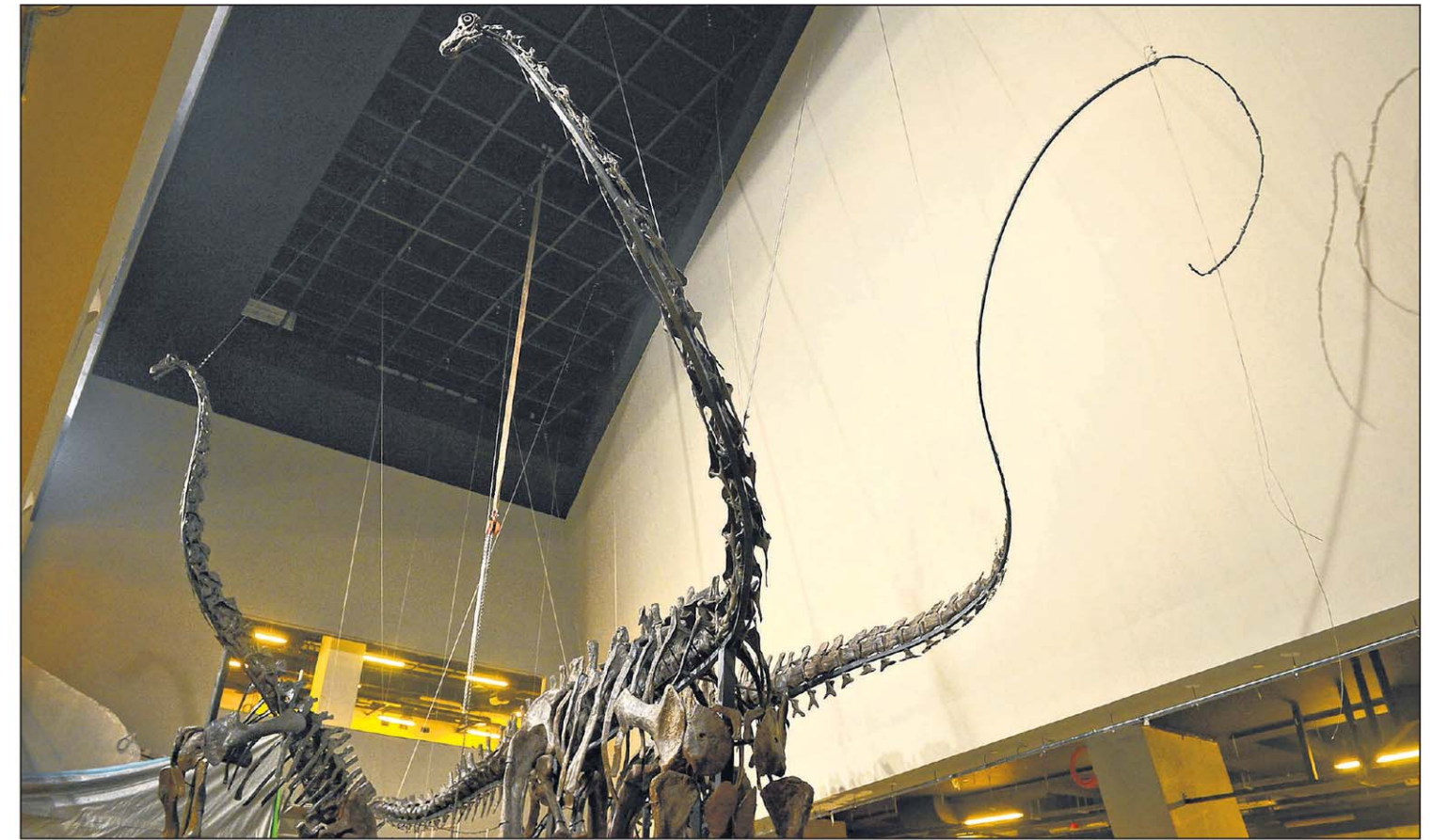
The bones were wrapped in paper towels, then encased in a protective plaster and burlap cast called a jacket so they could be transported without being damaged. Each jacket was marked for identification and moved to the lab where it was removed using a cast cutter.

Workers then painstakingly chipped rock away from the bones using an air scribe. A consolidant, or a strengthening liquid, was then used to preserve and harden the fossils.

When the bones arrived in Singapore, they were kept in a temperature-controlled warehouse in Tagore Lane until their new home was ready for them last year.

Before the bones could be mounted, experts like “dinosaur builder” Brock Sisson had to design the “poses” that would bring them back to life.

“We worked with the museum



The dinosaur trio at the Lee Kong Chian Natural History Museum, which opens to the public tomorrow. “Dinosaur builder” Brock Sisson says “they fit very nicely here and fill the space – it’s going to be a neat exhibit”. ST PHOTO: KUA CHEE SIONG

How three dinosaurs came to Singapore

■ Sept 5, 2011

The Lee Kong Chian Natural History Museum sealed the deal to acquire the three dinosaurs from Dinosauria International, a fossil company based in Wyoming, for about \$8 million.

■ April 18, 2012

Twinky, the smallest of the three dinosaurs at 12m in length, arrived in Singapore packed in 12 crates.

It spent a month at sea

after leaving the American state of Utah, where the bones were prepared.

■ Aug 24, 2012

Apollonia, which measures 24m in length, came here packed in 14 crates.

■ Oct 7, 2013

The largest of the trio, Prince, arrived in 27 crates. Prince and Apollonia are referred to by the museum as Twinky’s parents.

on making (the dinosaurs) interact, and came up with a design for the family group,” said the American. The dinosaur trio were found together, and could well have been a family.

At the museum, Prince looks as if it is welcoming visitors, while Apollonia watches over Twinky at play.

Said Mr Sisson: “The main hall where the dinosaurs are is a great space – it’s going to showcase the exhibit very nicely.”

“I’ve been to other museums where the dinosaurs are just in a big room, but they fit very nicely here and fill the space – it’s going to be a neat exhibit.”

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