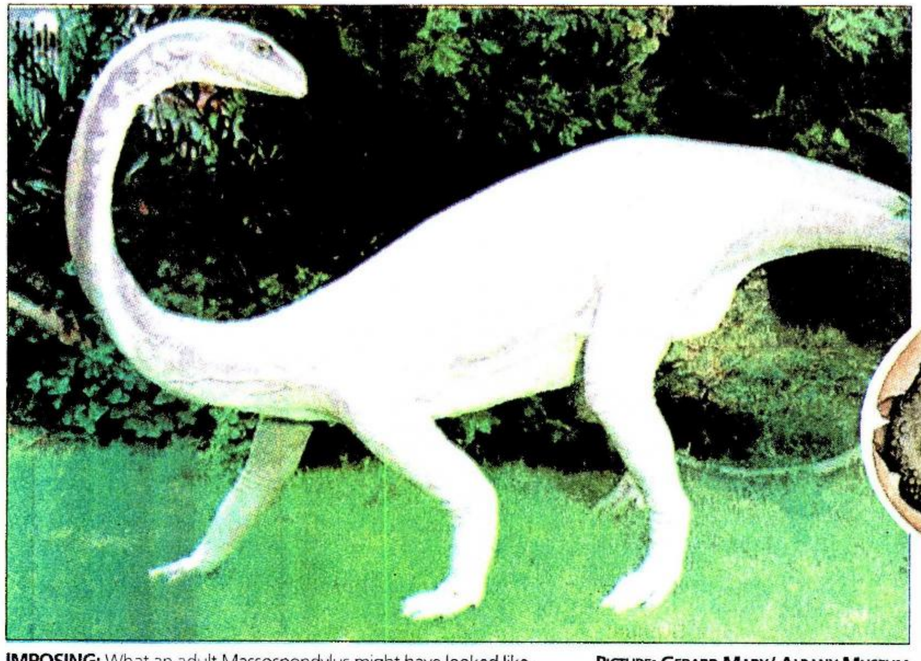
WHAT MAKES THIS FIND SO SIGNIFICANT?

- These are the oldest known dinosaur eggs (190-million years; the next oldest are less than 100-million years)
- They are also the oldest known eggs with embryos of any land-living vertebrate;
- The growth series from hatchling to adult gives detailed insights into the trajectories of growth of this prosauropod dinosaur, Massospondylus;
- The lack of teeth and the ungainly body proportions strongly suggest there was some degree of parental care after hatching;
- If this is true, it is the oldest evidence of dinosaurian parental care.



IMPOSING: What an adult Massospondylus might have looked like. **PICTURE: GERARD MARX/ ALBANY MUSEUM**

abilities that they named a ridge on the icy continent after him.

During his trips to visit his daughter, Kitching would stop over in the Golden Gate National Park. His favourite spot was close to the park's camping site, where a road was under construction. On this particular trip, Kitching quickly noticed a rock that contained unusual grey flecks.

"He suspected that these were pieces of fractured egg," says Raath. Under closer examination Kitching could make out the shape of eggs and possible bone.

SMALL BEGINNING: The team of scientists have been able to start to reconstruct the way the embryos may have looked. **GRAPHIC: K DUPUIS**

Back at Wits university, Kitching went to work on his find.

"He opened it up a bit and was blown away when he came across the top of a skull, he opened it up some more, then realised that it was too delicate and he didn't have the skills," explains Raath.

The fossil was to remain untouched for 25 years. Kitching was waiting for the right time.

Then in 2000, visiting academic Professor Robert Reisz convinced Kitching to lend him the specimen. Reisz believed that his assistant Diane Scott, at the University of Toronto, had the skills to reveal what the rock hid.

In her lab in Canada, Scott stared day after day into a 60-magnification microscope, as she prepared the fossil.

"It was challenging, it was like nothing I had prepared before. The bone was so soft that it was like trying to remove concrete off a slab of butter," she recalls.

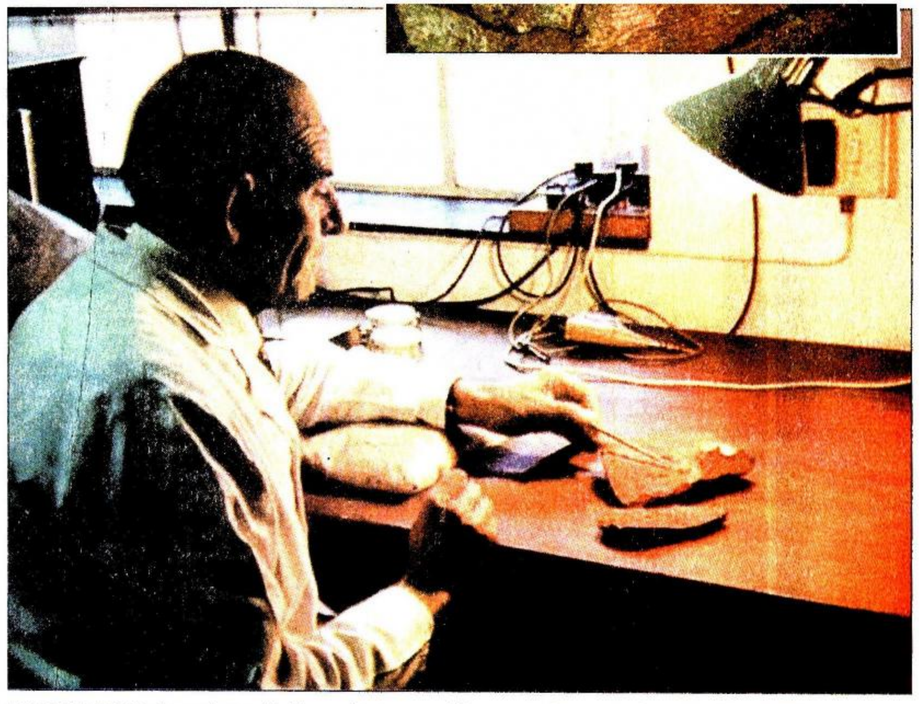
Working micro-millimetre by micro-millimetre Scott peeled away the rock. The work so delicate that when someone walked down the passage outside her lab, Scott was forced to stop what she was doing. Their footsteps would cause vibrations, magnified under the gaze of the microscope.

Slowly bone-by-bone, the skeletons emerged.

"As we went we sent images to Raath and Kitching," Scott says.

But by the time the eggs and the tiny bones were there for all to see, Kitching was dead. He died on December 24 2003, aged 81.

It was to be another year before his prehistoric nest returned to South Africa.



FASCINATING: Professor James Kitching points to one of the eggs in the group of seven he discovered.

"Sadly he didn't touch them again," says Scott.

As a tribute, Raath, Reisz and Scott added Kitching's name to the authors on an academic paper. That article shook the palaeontological world.

"It pushed our knowledge back a 100 million years. Here we were at an early stage of evolution, and we have something that is so bird-like," said Raath.

Their argument added to the theory that birds are the descendants of dinosaurs, who cared for their young and were most likely covered in primitive feathers.

Maropeng is using a slightly different pitch, to get people to come and see Kitching's eggs. They have themed it on Father's Day. "We put it like this, come see what mom and dad were doing 190 million years ago, when times were so harsh," says Marshall.

But in Scott's lab, Kitching's legacy continues. On her desk is a lump of rock, another nest, found close to the road where Kitching got the original clutch. Ahead are months of precision work.

The eggs will be on display at Maropeng until the end of June.