

> Big dinosaur news!

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> Digging dinosaurs

Australian dinosaurs are hot news right now, with the announcement early this month that three new dinosaurs were discovered at the bottom of an ancient billabong in Winton, Queensland. The fossils include Australia's biggest meat-eater, a new genre named *Australovenator*, the most complete meat-eating dinosaur skeleton ever found in Australia. With the *Australovenator*, nicknamed Banjo, were two titanosaur sauropods, giant dinosaurs with long necks, one of which was 16 metres long.



Australovenator image courtesy [ABC Science](#).

Original image source: T.Tischler, Australian Age of Dinosaurs Museum of Natural History

Also in the news in this month were two research papers on dinosaurs with unusual bites – one on hadrosaurs and one on psittacosaurus, parrot-like dinosaurs that are the first dinosaurs known to have lived on a diet of nuts and seeds, as birds do today, instead of the usual dino diet of plants or meat.

By the way, for NSW and ACT schools we have developed a hands on workshop on dinosaurs! [Click here for further details](#).

Every grown up kid loves to mentally travel back in time as palaeontologists uncover more about these strange creatures that once ruled the planet. If you have some old coffee grounds, and would like to get your hands dirty with some palaeontologically-themed experiments, here's a couple you can really sink your teeth into...

> Coffee ground fossils

You will need

1 cup used coffee grounds

1/2 cup cold coffee

1 cup plain flour

1/2 cup salt

Mixing bowl

Wax paper

Objects with which to make 'fossils'

Mix the ingredients together and knead the dough until soft. Spread the dough onto wax paper and cut round shapes using a knife, jar, glass or cookie cutter. Press objects into the soft dough to make 'fossil' impressions. The dough can be left to harden overnight. (From [Kaboose crafts](#)).



What happens?

The coffee ground fossil is a nice variation on fossil-making experiments because it leaves a dark impression in the dough and you can clearly see your 'fossil'. Fossils are the remains of animals, plants and their traces that have been preserved in rock. A fossil can be a cast (where the rock replaces the trace or body part, leaving a 3D object) or a mould (a hollow impression left in the rock), or the trapped remains of hard body parts such as teeth or bones. Many dinosaurs are classified based on only a fragment of jaw or part of an ankle bone. Palaeontologists examine these fragments to find out more about how dinosaurs move and ate.

There are a couple of sites (try the [Aust gov's Culture Portal](#)) you can check to see where the famous fossil localities in Australia are - but the best way to see fossils for yourself is to go to your local beach or rock outcrop and keep your eyes peeled - you might just make the next big find.

> A big bite

Dino products



Dinosaur quotes:

"It's kind of quirky that we have a national song about a man dying at the bottom of a billabong and we've got the same scenario playing out here 100 million years ago with a couple of dinosaurs."

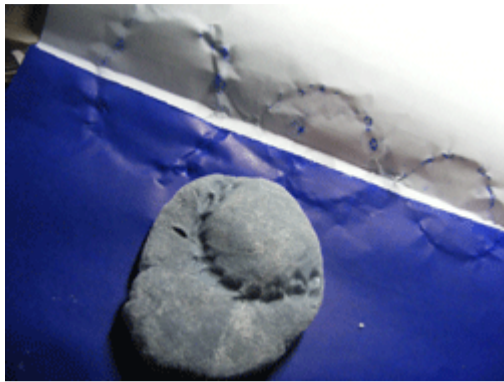
Queensland
Museum
palaeontologist Dr
Scott Hocknull,

, July 3 2009

You will need

Carbon paper
Normal paper

Teeth play an important part in the classification of dinosaurs because teeth are very durable, and are often well preserved. You can read about new discoveries on dinosaur teeth at [Cosmos magazine](#), or if you're dying to get your teeth into something, try biting down on a folded piece of paper with a slip of carbon paper inside. On the inside of the paper you'll make an impression of either the upper or lower part of your jaw.



See if you can pick out your individual teeth and decide how they would be best used (side to side plant chewing, or sharp cutters for tearing meat). You can also get an impression of your teeth by biting into some dough (just ignore the taste!). Get the bite on your family and friends!

> Rubber bones

You will need

Vinegar
Clean chicken bones

If you've never done this it's worth a try. Soak the bones in vinegar for at least an hour. Vinegar is acetic acid and bones are made of roughly 10 per cent calcium carbonate. Calcium carbonate forms a framework on which bone growth takes place. As the bone soaks, the calcium carbonate reacts with the acid vinegar, producing carbon dioxide gas (this is the bubbles coming off the bone). Leave the bone until it is soft and bendable - you can even tie it in knots. If you take the bones out of the vinegar and leave them overnight they will harden in the position you left them, by reabsorbing carbon from the carbon dioxide in the air.

> More Australian dinosaurs

More on Australian dinosaurs:
[Australian dinosaur story](#) (Department of Environment)
[Dinosaurs and their relatives](#) (Australian Museum)
[Dinosaurs in Australia](#) (Museum Victoria)

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Another quote

"These discoveries are a major breakthrough in the scientific understanding of prehistoric life in Australia."

Queensland Premier, Anna Bligh, 4 July 2009

Yet another quote

"Dinosaur fossils? God put those there to test our faith."

US Comedian Bill Hicks, b.1961

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