



Birds are living dinosaurs but crocodiles are actually not. Why not?

HIGH AND LOW: A wedge-tailed eagle chick in a nest high above the ground, main picture, and a shy albatross sitting on an artificial nest on Albatross Island, inset.



Researchers at the University of Tasmania are using GPS tracking to study wedge-tailed eagles. The solar-powered tracking devices are fitted to juvenile eagles using backpacks. Before they can do that though, one researcher has to climb trees up to 80-metres high, place the young eagles in a secure bag and carefully lower it to the ground. Once fitted with the backpack the eagles are returned to the safety of their nests.

READ MORE HERE: <https://www.utas.edu.au/about/news-and-stories/articles/2020/1011-eagle-eye-on-endangered-bird>

NEST MAKER

WE find the term “bird brain” curious.

It is usually used as an unkind reference about another person.

But we would suggest if someone ever calls you a bird brain you should take it as compliment.

For one thing birds are the only living dinosaurs.

Scientists trace their origins back to a meat-eating group of dinosaurs called theropods that first appeared about 231 million years ago.

But that sounds like an interesting subject for another time.

The amazing talents of birds have often featured in the *The Wonder Weekly*.

In the October 19, 2020, edition, we talked about the epic flights

of shorebirds.

For example, eastern curlews visit Tasmania between late August and March each year, having travelled all the way from their breeding grounds in Russia, Mongolia and China.

They navigate this hazardous trip of 12,000km or more, using the Sun, stars, the Earth’s magnetic field and landmarks.

But today’s edition is all about nests, which vary almost as much as birds themselves.

Wedge-tailed eagles like to build nests in the highest trees available, and in Tasmania that can be up to 80 metres from the



ground. Built from sticks and lined with leaves, these nests can be two metres wide and weigh more than 400 kilograms.

They are so large, smaller birds have been known to nest in

the underside of the eagles’ construction, which is a great place to hide from predators.

Tasmania is home to 27 hollow-nesting bird species.

These include seven invasive species, which compete for nesting sites with natives.

Our endemic forty-spotted pardalotes build a cup-shaped nest of bark and grass, lined with feathers or fur in a hollow.

Another bird species endemic to Tasmania, yellow-throated honeyeaters, construct their nests close to the ground in dense shrubs, and use spider web to bind together glass and bark.

This species is well-known for collecting hair from live animals - horses, dogs and even humans - to line their nests.

The nests of Tasmanian scrubwrens are nearly spherical with a rounded side entrance.

While Tasmanian thornbills take this design to a new level by adding a hinged flap that almost covers the entrance hole.

Cape Barren geese lay their eggs in a down-lined nest in the tussocks of open grassland.

While Tasmanian native-hens will build nests on the ground or

over water from grass, reeds and other vegetation.

Then there’s our seabirds, such as little penguins, short-tailed shearwaters and shy albatross.

Little penguins, the smallest of all penguins, usually nest in rocky burrows or under dense vegetation near the sea shore.

Short-tailed shearwaters, commonly known as mutton birds, create leaf-lined chambers at the end of a burrow in the ground.

Shy albatross lay a single egg each year in a lumpy mound of mud, vegetation and rocks on just three islands off the Tasmanian coast—Albatross Island in the north, and Pedra Branca and Mewstone islands in the south.

CONTINUED PAGE 2



Bald eagle nests can be large enough for a human to sit on.

The smallest nests made by birds belong to the bee hummingbird.

Swiftlet nests - made out of layers of their own saliva - are used in bird's nest soup.

Nests of all shapes and sizes

FROM PAGE 1

There is often a shortage of nest building material on these islands, and the nests can be damaged by heavy rainfall and strong winds.

These factors are not helping shy albatross numbers, so a few years ago scientists started helping out the threatened species by providing artificial nests made from light-weight concrete blocks, or using mud-brick techniques.

Tasmania is also home to nesting shorebirds, in fact about half the world's population of hooded plovers, pied oystercatchers and sooty oystercatchers breed on Tasmania's beaches.

Their numbers are in decline, but we can all help by giving their nesting sites a wide berth.

They lay their eggs on the dry sand above the high tide mark or among dunes, so if you walk along the water's edge you won't risk trampling them.

ROOM WITH A VIEW: Giant wandering albatross nest at Prion Island, South Georgia, above, and a bee hummingbird, below. Pictures: iStock/ Dirk Talsma/ James Bloor Griffiths

Nest making challenge

BIRDS are actually super smart, when you consider how they gather together materials to make strong, lightweight homes.

Your challenge is to make a cup-shaped bird's nest from natural materials you can source close to home.

This might just be the garden at home, or perhaps you could go for a walk in the park or in bushland with an adult family member and see what you can find.

Remember birds do this with only their beaks and feet, which means making many trips.



Think about the kinds of materials birds use, to make their nests as strong as possible, and a warm and safe home for their eggs/chicks.

Some nice green twigs would be a good start, so you can bend and weave them together to create an outer structure.

Moss, mud, dry grass, leaves, feathers and fur are some other materials to think about.

Perhaps start with a design for your nest. Building the nest will take perseverance, so take as long as you need.

Once you have built your nest, you might like to test it the scientific way.

How comfortable is your nest?

Feel the inside of your nest, and give it a mark out of 10, with one being really rough, and 10 the softest thing you have ever felt.

Record your observations on paper.

How strong is your nest?

You could drop your nest from a height to test it.

Remember birds are amazing engineers, and building nests is hard, so don't be disappointed if your nest falls apart.

Again, record your result.

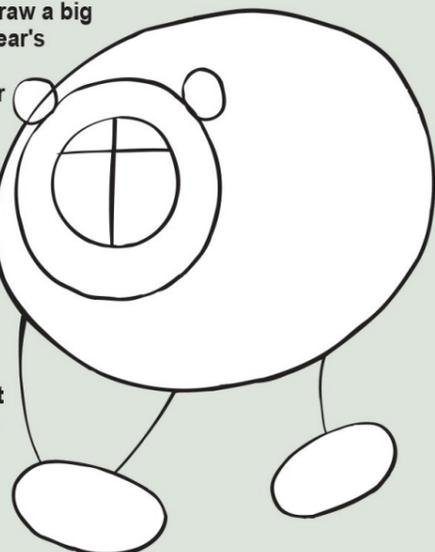
Finally ask yourself how you could improve your nest?

Have a second try if you like.

When you have finished with your nest, perhaps you might like to put the materials back outside for a real bird to make use of.

How to draw a BEAR

Using a pencil, draw a big circle for your bear's body. Add a smaller circle for his head and inside that, an even smaller one with lines through it for his face. Draw two very small circles where his ears will be. Lastly add two ovals for his feet and attach them to the big circle with curved lines. These will be your guides.



Draw his muzzle, nose and mouth inside the face circle. Next, draw the shape of his head and inside the smallest circles add his ears. Draw some curved and 'w' shaped lines from his body to his feet to give him some legs. A long curved line across his body defines his belly.



In the ovals draw the shape of his feet and toes. Don't forget to give him some claws. Finish his face, then rub out all the lines you don't want and ink him in with a pen or fine tipped texta. To finish, just add some colour.



Artwork: www.johnpollyfarmer.com.au/