

Focus Questions

As a class, discuss the stories featured in the episode of BTN Classroom and record the main points of the discussion. Students will then respond to the following focus questions.

Defence Spending

- 1. Summarise the BTN Defence Spending story.
- 2. Which two countries primarily run Exercise Talisman Sabre?
- 3. How much money does Australia spend on defence each year and what is it spent on?
- 4. Australia has military alliances with the US. True or false?
- 5. What has US President Donald Trump said about Australia's defence spending?

Age Verification Rules

- 1. When will the new age verification rules start in Australia?
- 2. Why is Australia introducing age verification rules for search engines like Google?
- 3. What methods will be used to check your age? Give one example.
- 4. What are some challenges or risks with the new age verification rules?
- 5. What do you think about the new age verification rules? Give your opinion on the topic.

UNESCO Rock Art

- Where in Australia can you find the Murujuga Cultural Landscape? Highlight the location on a map of Australia.
- 2. How old is the Murujuga rock art?
- 3. What can you see in the Murujuga rock art carvings? Describe the artwork.
- 4. The Murujuga rock art has been added to the UNESCO World Heritage List. What does that mean?
- 5. What are some other Australian sites on the UNESCO World Heritage list? Name 2-3.

Check out the <u>teacher</u> resource on the Archives page.

EPISODE 19

22 July 2025

KEY LEARNING

Students will view a range of BTN stories and use comprehension skills to respond to a series of focus questions.

CURRICULUM

English - Year 4

Use comprehension strategies to build literal and inferred meaning to expand content knowledge, integrating and linking ideas and analysing and evaluating texts.

English - Year 5

Use comprehension strategies to analyse information, integrating and linking ideas from a variety of print and digital sources.

English - Year 6

Use comprehension strategies to interpret and analyse information and ideas, comparing content from a variety of textual sources including media and digital texts.

English - Year 7

Use comprehension strategies to interpret, analyse and synthesise ideas and information, critiquing ideas and issues from a variety of textual sources.

Moa De-extinction

- 1. Fill in the gaps. The moa lived in _____ and became extinct about _____ years ago.
- 2. What did the moa look like? Describe its physical features.
- 3. What are scientists at a US bio-tec company doing to bring the moa back from extinction?
- 4. What other species is the company trying to bring back from extinction? Name two.
- 5. Why do some people think de-extinction is not a good idea?

Check out the <u>teacher</u> resource on the Archives page.

Charity Flights

- 1. Summarise the BTN Charity Flights story.
- 2. Who had the idea to connect doctors and patients using planes?
- 3. The first plane used by the Royal Flying Doctor Service was borrowed from...
 - a. Ansett
 - b. Rex Airlines
 - c. Qantas
- 4. Before the Royal Flying Doctor Service began how did people in remote areas reach a doctor?
- 5. How does Little Wings help Winnie and her family?



UNESCO Rock Art

Focus Questions

Discuss the BTN story as a class and record the main points of the discussion. Students will then respond to the following:

- Where in Australia can you find the Murujuga Cultural Landscape? Highlight the location on a map of Australia.
- 2. How old is the Murujuga rock art?
- 3. What can you see in the Murujuga rock art carvings? Describe the artwork.
- 4. The Murujuga rock art has been added to the UNESCO World Heritage List. What does that mean?
- 5. What are some other Australian sites on the UNESCO World Heritage list? Name 2-3.

Activity: Class Discussion

Discuss the BTN UNESCO Rock Art story in small groups or as a class. Ask students to record what they know about rock art in Australia. What questions do they have? Use the following questions to help guide discussion:

- What do you know about rock art?
- Where can you find rock art?
- What types of images, shapes and symbols feature in rock art?
- Why is rock art important to Indigenous people?
- How is rock art being cared for?
- Why is it important to look after rock art?



What did you learn from the story?

What questions do you have about the story?

EPISODE 19

22 July 2025

KEY LEARNING

Students will learn more about Indigenous rock art; its importance to Indigenous people and what is being done to protect it.

CURRICULUM

HASS - Year 4

Pose questions to investigate people, events, places and issues.

HASS - Year 5 & 6

Develop appropriate questions to guide an inquiry about people, events, developments, places, systems and challenges.

Locate and collect relevant information and data from primary sources and secondary sources.

HASS - Year 7

Construct significant questions and propositions to guide investigations about people, events, developments, places, systems and challenges.

Apply a methodology to locate and collect relevant information and data from a range of primary sources and secondary sources.

Activity: KWLH research

The KWLH organiser provides students with a framework to explore their knowledge on the topic of rock art and consider what they would like to know and learn.

What do I <u>k</u> now?	What do I <u>w</u> ant to know?	What have I learnt?	How will I find out?

Questions to research

Students will collect and record information from a wide variety of sources. Students may develop their own question for inquiry or select one of the questions below.

- In the Pilbara region, specifically around Murujuga, the local Aboriginal word for rock art, particularly petroglyphs, is Marni. The local Aboriginal word for rock art in Kakadu is gunbim. What is the local aboriginal word for rock art in other parts of Australia?
- What are some of the most visited rock arts sites around Australia? Locate and highlight them on a map. Choose one example of rock art to explore in more detail.
- What's the difference between petroglyphs and pictographs? Find examples.

Activity: Rock Art Investigation

Students will understand the cultural significance of Indigenous rock art and explore one specific example in depth. Students will learn about petroglyphs (rock engravings) and pictographs (drawings) which are a key component of rock art. Below are some examples of rock art around Australia. Alternatively students may want to find their own example of rock art to study.



Walinynga (Source: National Museum Australia)



Murujuga rock art (Source: ABC)







Murujuga rock art (Source: ABC)

Initial Observations

What do you notice?

- Describe the main features of the rock art. What sorts of colours, lines and shapes do you notice?
- What else do you notice? Can you see people, animals or spiritual figures in the art? Write as much as you can about what you see.
- What do you think the images are telling us?

Further Investigation

Students will respond to one or more of the following questions:

- Where is it located and how old is it? Locate on a map of Australia.
- What type of rock art is it? Is it a petroglyph or pictograph?
- Find the name of the place in both the Indigenous and English languages.
- What Indigenous language groups have connections to the land where the rock art is located?
- What story does the rock art tell? Is it a traditional Dreaming story? Explain what you know about the Aboriginal story.

Want to know more about where you live?

- Check out the <u>Gambay language map</u> to learn more about traditional languages spoken in your
- To learn whose Country you're on, visit David Horton's <u>Map of Indigenous Australia</u> on the AIATSIS site.
- Cross-reference with other sites, for example your local council or Aboriginal land council.

Useful Websites

- UNESCO approves world heritage listing for WA's Murujuga rock art ABC News
- Caring for rock art in Kakadu ABC Education
- <u>Petroglyphs and pictographs: Earliest known Australian rock art</u> (digital classroom) National Museum Australia
- Namarrkon and Barrkinj ABC Education
- What is First Nations art? BTN High
- This Place: Djimubarn, sacred rock art shelter ABC Education



Teacher Resource

Moa De-extinction

Focus Questions

Discuss the BTN story as a class and record the main points of the discussion. Students will then respond to the following:

- Fill in the gaps. The moa lived in _____ and became extinct about _____ years ago.
- 2. What did the moa look like? Describe its physical features.
- 3. What are scientists at a US bio-tec company doing to bring the moa back from extinction?
- 4. What other species is the company trying to bring back from extinction? Name two.
- 5. Why do some people think de-extinction is not a good idea?

Activity: Class Discussion

What do you see, think and wonder?

After watching the BTN Moa De-extinction story, students will respond to the following questions:

- What did you SEE in this video?
- What do you THINK about what you saw in this video?
- What did you LEARN from this story?
- What was SURPRISING about this story?
- What QUESTIONS do you have about this story?

What do you see, think and wonder?

Activity: Q&A

Are you curious about extinct animals? Students will make a list of questions they have about the BTN story and the extinction of the moa. Students will use the internet to find answers to their questions and share their findings with the class.

How did the moa become extinct?

Why do we study extinct animals?

EPISODE 19

22 July 2025

KEY LEARNING

Students will learn about the moa and understand the importance of studying extinct animals.

CURRICULUM

Science - Year 4

Living things depend on each other and the environment to survive.

Science - Years 5 & 6

Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena and reflects historical and cultural contributions.

Scientific knowledge is used to solve problems and inform personal and community decisions.

Science - Year 6

The growth and survival of living things are affected by physical conditions of their environment.

Science - Year 7

Scientific knowledge has changed peoples' understanding of the world and is refined as new evidence becomes available.

Activity: Glossary

Students will brainstorm a list of key words that relate to the BTN Moa De-extinction story. Here are some words to get them started.



Ask students to write what they think is the meaning of each word (including unfamiliar words). They will swap definitions with a partner and ask them to add to or change the definition. Check these against the dictionary definition.

Further activities for students:

- Students will add to their glossary by downloading the transcript for the BTN Moa De-extinction story and highlight all the words that relate to the topic.
- The word moa is actually a Māori word. What does it mean?
- Use as many of the following words to write a summary about the moa: extinct, flightless, New Zealand, herbivore, DNA and species.

Activity: Research project

Discuss the information raised in the BTN Moa De-extinction story. What questions were raised in the discussion and what are the gaps in students' knowledge? The following KWLH organiser provides students with a framework to explore their knowledge on this topic.

What do I <u>k</u> now?	What do I <u>w</u> ant to know?	What have I learnt?	How will I find out?

Students will develop their own question/s to research or choose one or more of the questions below.

- Why did the moa become extinct?
- What is the closest living animal to the moa? What are the similarities?
- How was the New Zealand environment suited to the moa?
- Can we bring the moa back from extinction? Explain.
- What impact did people have on the moa?
- What can we learn from the extinction of the moa?
- Why is it important to learn about extinct animals?

Activity: Back from Extinction

Did you know it is estimated that 99.9% of all species that have ever existed on Earth are now extinct. As a class, students will brainstorm and make a list of all the animals they can think of that are extinct.

Students will use their imagination and scientific thinking to bring the moa back from extinction. Students will investigate the similarities between the moa (extinct) and the emu (living animal) and/or the tinamou (living animal). Alternatively, they may want to choose another extinct animal that they would be excited about to see back in real life.

Students will:

- Research the basic facts about the moa and create a quick factsheet which includes the following
 information: common and scientific name, where it lived, what it looked like, when it went extinct,
 why it became it extinct.
- Compare the moa to other species that are living today to discover which would be better suited to help bring the moa back to life. Which of these two living species has the most similarities to the moa? Compare what they look like, and their classification. Use the table below to record the information you find.

Information	Moa (extinct species)	Emu (living species)	Tinamou (living species)
Scientific name			
Scientific classification Order: Family:			
Flight ability			
Body shape			
Feathers			
Diet			
Habitat			
Behaviour			

If you were to bring the moa back from extinction using DNA from one of its closest living relatives, what would it look like? Using their previous research students will imagine what the moa would look like if it was brought back from extinction. Use the following as a guide for this activity:

- Illustrate the species using only a black felt-tip pen on a piece of A4 art paper include as much detail as you can. You may want to draw a scientific illustration or draw the animal in its natural habitat. Label important features.
- Create a 3D model of your new species using upcycled materials.
- Turn your artwork into a museum style exhibit poster.

BTN would love to see your students' artwork! Send your artwork to us at btm@abc.net.au

Activity – Choose a Project

Individually or in small groups, students will choose one of the following projects to work on and then present their findings to the class.

Short story

Write a short story or diary entry from the perspective of the moa just before they became extinct.

Quiz

Create a true or false quiz to test your classmate's knowledge about the moa.

Class debate

Should we try to bring extinct animals back? Investigate the pros and cons and have a mini class debate.

Did you know?

Using the information in the BTN story and your own research, create a *Did You Know* fact sheet about moa.

Publish using <u>Canva</u>

Useful Websites

- Return of the Moa BTN Newsbreak
- Back from Extinction BTN
- <u>Australia's Extinct Animals</u> Australian Museum
- Extinction Over Time Smithsonian National Museum of Natural History



BTN Transcript: Episode 19- 22/7/2025

Yaama. Jack here with a whole new term of BTN. I hope you had a great break. Let's see what's coming up. We look at Australia's new internet searching rules, find out about Australia's latest world heritage site and Learn about the guest to resurrect the moa.

Defence Spending

Reporter: Justina Ward

INTRO: But first, we're going to take a look at a big military exercise that's happening in Australia right now. It's called Talisman Sabre, and it involves thousands of defence workers from around the world but it's also drawing attention to some big questions around the future of Australia's military. Take a look.

JUSTINA, REPORTER: On the ground, in the air and on the water.

BRIG. TIM ORDERS, AUSTRALIAN ARMY: You're gonna see an increase in military vehicle traffic in and around the roads in Darwin and Katherine but, citizens shouldn't be alarmed.

So, what's this for exactly?

VICE ADMIRAL JUSTIN JONES, AUSTRALIAN DEFENCE FORCE: Welcome to Exercise Talisman Sabre 2025.

It's a joint military exercise that's run by Australia and the US every couple of years.

It's an honour to join you.

And this year it's the biggest it's ever been with 30,000 military personnel from 19 nations taking part that's all about...

VICE ADMIRAL JUSTIN JONES: Operating together, training and rehearsing our war fighting.

It's also a chance to show off our high-tech weapons and build relationships with our neighbours. But organising exercises like this and keeping our forces in tip top shape doesn't come cheap. At the moment, Australia spends around \$56 billion a year on defence. That pays for things like weapons, vehicles, machinery and paying wages for people working in defence. And the government says it's planning to spend even more.

ANTHONY ALBANESE, AUSTRALIAN PRIME MINISTER: \$57 billion over 10 years, we are increasing our defence spending and investment by more than \$10 billion.

That might sound like a lot, and it is, but it's still only about 2.3% of our GDP, or gross domestic product, which is basically the value of everything the country produces in a year. Meanwhile the US spends almost 1.5 trillion dollars which is about 3.4 per cent of its GDP. All of that money has helped to make America's defence force one the most, if not, the most powerful in the world. It's why since the end of the Second World War, Australia has relied on its alliance with the US, knowing that if we need help, America would be there. And it's not just Australia. Lots of other countries have military alliances with the US that they rely on to keep them safe. But recently US President Donald Trump has questioned whether or not that's fair.

DONALD TRUMP, US PRESIDENT: If you're not going to pay your bills, we're not going to defend you.

He's pressured European allies to increase their defence spending.

DONALD TRUMP, US PRESIDENT: This week the NATO allies committed to dramatically increase their defence spending to that 5% of GDP. This is a big win for Europe and for actually Western civilization.

His government has also asked Australia to up its defence spending to 3.5% of GDP.

PETE HEGSETH, US SECRETARY OF DEFENSE: A long standing, incredibly important partnership with our friends in Australia.

That would be \$40 billion extra a year. So, a lot and our prime minister wasn't exactly on board.

ANTHONY ALBANESE, AUSTRALIAN PRIME MINISTER: we're a sovereign nation. We determine our defence policy here.

But some say we do need to have a serious think on defence spending, right now more countries are fighting each other than at any point since the 2nd world war, we've got growing tensions between the world's superpowers. And our most powerful ally wants to put...

DONALD TRUMP, US PRESIDENT: America First. America first. America First.

We've also seeing some big changes in the way technology is used to fight wars. For now, our military says our alliance with the US is going strong.

BRIG. GEN. SHANNON SMITH, US AIR FORCE: The reason we're here today is our commitment to our alliance with Australia our commitment to the region.

As our soldiers continue to show off the best they've got.

News Quiz

What big change is the UK making to its electoral system? Is it introducing compulsory voting, lowering the voting age to 16, or making elections every three years instead of five? It's lowering the voting age to 16. It means around 1.6 million young Brits will be able to vote at the next election.

UK Teen: I think we deserve that responsibility as we're more, like, aware about what's going on in the world.

UK Teen: I'm happy about it because it's always really annoying watching, like, older people vote and then... but realistically, it's not going to affect them, it's going to affect our futures.

DONALD TRUMP, US PRESIDENT: We're very, very unhappy with them and we're going to be doing very severe tariffs if we don't have a deal in 50 days.

Which country was US President Donald Trump talking about? China, Russia or Israel?

DONALD TRUMP: We are very unhappy - I am... with Russia.

Mr Trump wants the Russian president, Vladimir Putin, to agree to a peace deal with Ukraine. He's agreed to sell billions of dollars' worth of weapons to NATO countries, which they'll give to Ukraine to help it fight Russia.

Which Aussie state had an election on the weekend? It was Tasmania. It's actually their second state election in two years. And it happened because Parliament passed a no-confidence motion against the premier, Jeremy Rockliff, meaning he didn't have enough support to govern.

JEREMY ROCKLIFF: The people of Tasmania in return, have said that they have no confidence in the Labour Party to form government.

Mr Rockliff declared victory, but no party actually won enough seats to govern on its own, which means they'll need to negotiate with independents and minor parties.

And do you know what's happening here on the River Thames? Is it a swan census, a boat race, or a historic bridge inspection? It's a swan census.

DAVID BARBER, ROYAL SWAN MARKER: It's called swan upping because we go up the river and we up the swans out of the water.

The official swan count is a ceremony that's been going since the 12th century. Basically, all unmarked swans on the Thames are the property of the King, and to make sure no-one was pinching them for dinner officials would do a swan head count.

DAVID BARBER: But today, it's all about conservation and education.

Age Verification Rules

Reporter: Tatenda Chibika

INTRO: Recently, Australia became the first country in the world to make internet search providers check your age when you log in. The new rules are designed to make sure kids aren't seeing harmful stuff online. But will they work? Tatenda found out more.

PERSON: I feel like on Google I just look up like whatever comes to my mind, like if I'm curious about something, I'll search it up and see if there's an answer for it.

PERSON: Chat GPT. That's what I search up.

PERSON: Sometimes I go online shopping on Google and then I also like to help me with my homework and stuff.

TATENDA, REPORTER: Yeah, for a lot of us it's kind of hard to imagine a world without search engines.

But along with all that useful information, entertainment, recipes and the name of that one annoyingly catchy song you heard at the shops but couldn't memorise all the lyrics to, there's also some stuff that you probably shouldn't be seeing.

PERSON: Just like there's sometimes weird ads and stuff

PERSON: it's just, like naked people. It's like everything's out there, which is too much exposure, too much exposure

PERSON: it's been a lot of inappropriate things sometimes.

That's why from December, search engines run by companies like Google and Microsoft will have to check the ages of anyone who logs in.

It's among a whole heap of changes being introduced under the Online Safety Act.

JULIE INMAN GRANT, ESAFETY COMMISSIONER: Very few of these technologies and platforms were created with children in mind or with safety as a primary goal.

If you're under 18 search results will filter out things that are inappropriate like gambling, violence or other stuff that's not meant for kids. And the eSafety Commissioner's making the industry itself come up with the solutions.

So, how exactly are they going to guess your age well the government has given them a few options. For example, they might check other forms of ID like credit cards or licenses. They might get your parents to give permission, they might rely on other platforms that have already checked your age, or they might use technology that uses your face to guess your age. But as these guys found out recently, when they tried out some face scanning software, it doesn't always work.

STUDENT: I'm getting yeah 23, upwards of 23.

STUDENT: I just scrunched up my face all angry like this

PERSON: And what happened?

STUDENT: and the thing gave me 41 years old.

STUDENT: It went from 15 to 14, to 13. STUDENT: Getting younger by the minute.

These are the type of things tech companies will use to check your age once the governments social media ban comes into effect later this year, so the clock's ticking to figure out what works. Although, some people think nothing will be totally effective.

LISA MAE GIVENS, RMIT PROFESSOR: At the end of the day, where there's a will there's a way, people can definitely still access this content by not logging into an account they could also use a VPN to get around it by pretending to not be in Australia for example.

There are also some concerns that the new rules will risk people's privacy. Companies will need to store all that data and that can make them a target for cyberattacks. And some people think it's more important to teach young people how to use the internet responsibly instead of shielding them from some parts of it.

So, what do you think?

PERSON: There's some things that are on the internet that people my age shouldn't like, really see and I think that age verification is a good way to stop that.

PERSON: I know kids that like, don't really use it for what they're really meant to. So, yeah, I think filtering should happen.

PERSON: As a child I grew up and I could choose what I was exposed to a certain degree, whereas now that choice is taken away. So, yeah, I think it's important.

PERSON: I think it's really hard to shelter anyone from what the world is.

PERSON: Education and educating your child is the main thing, but also those restrictions being put in place is definitely like a good add on to that.

Quiz

Do you know what the most searched-for word is? Weather, YouTube or Google? It's YouTube. More than a billion people type it into Google's search bar every month.

UNESCO Rock Art

Reporter: Jack Evans

INTRO: Now to Australia's brand-new World Heritage Site and when I say new, I mean incredibly ancient. The rock art at Murujuga in Western Australia is up to 50,000 years old and it's now joined the likes of Stonehenge and the pyramids on a very special list.

On the northwest coast of Western Australia, you'll find the Murujuga Cultural Landscape, home to the biggest and most diverse collections of rock art engravings in the world. Some of which date back more than 50,000 years and include carvings of extinct species and the earliest depiction of the human face.

PETER JEFFERIES, MURUJUGA ABORIGINAL CORPORATION: They tell the story of our ancestors and what they've done over tens of thousands of years.

That's why at a meeting in Paris the United Nations Heritage Committee decided to add this sacred site to the World Heritage List.

UNESCO: Let me congratulate Australia on behalf of the entire committee.

BELINDA CHURNSIDE, MURUJUGA ABORIGINAL CORPORATION: We have all come here together and from far away from the Murujuga lands. This has been a long-awaited journey and a fight for our elders, our gurdambara, our old people and we are thankful to receive this recognition from a global scale. Thank you everyone.

PETER HICKS, MURUJUGA ABORIGINAL CORPORATION: We were very, very happy that, you know. That word probably can't describe it, you know, to the full extent of it.

Murujuga, alongside 25 other sites from around the world, will now join a long list of famous sites, like the Taj Mahal in India, the Pyramids of Giza in Egypt, Stonehenge in the UK, Machu Picchu in Peru and the Great Wall of China in, well, China.

The United Nations Educational, Scientific and Cultural Organisation or UNESCO started the World Heritage List in 1978 as a way to protect sites that had "outstanding universal value to humanity". Today the list includes 1223 sites from 170 countries. Here in Australia, we have 21 on the list including the Sydney Opera House, Uluru-Kata Tjuta National Park, the Blue Mountains, the Great Barrier Reef and now Murujuga.

Being heritage listed is a big honour and helps to boost tourism, but it also means governments are put under more pressure to protect sites and have to regularly report to UNESCO. So, Traditional Owners are hoping the heritage listing helps to keep Murujuga safe. They say nearby mining and gas projects cause damage and erosion to the rock art.

RAELENE COOPER, MARDATHOONERA TRADITIONAL CUSTODIAN: You cannot have industry. And culture coexist.

MURRAY WATT, ENVIRONMENT MINISTER: In the end, what persuaded the committee was both the scientific evidence that was put forward but also the genuine passion from the traditional owners to see this World Heritage listing be secured.

They're hoping that by showing the world how special this site is they can make sure it's still there for future generations.

PETER JEFFERIES, MURUJUGA ABORIGINAL CORPORATION: We start a new journey or a new story that we created in the rocks today and we will continue to manage culture and country as our ancestors have already done or have done prior to or previous to us.

BELINDA CHURNSIDE, MURUJUGA ABORIGINAL CORPORATION: This is a testament to the true dedication and commitment. Our resilience of Aboriginal people. Thank you all.

Quiz

Which of these Australian sites has been on the World Heritage List for the longest? Uluru, Kakadu National Park or the Melbourne Royal Exhibition building? It's Kakadu National Park. It was one of three Australian sites to make the list in 1981, along with Willandra Lakes and the Great Barrier Reef.

Moa De-extinction

Reporter: Justina Ward

INTRO: Now, have you ever seen one of these. It's a moa and you probably haven't because they've been extinct for hundreds of years. But an American bioscience company wants to bring them back and so does Peter Jackson. Here's Justina.

NARRATOR: Some things that should not have been forgotten were lost. History became legend. Legend became myth. And for 500 years, the moa passed out of all knowledge, until.

WIZARD: Whoa!!

HOBBIT 1: What's that?

HOBBIT 2: It looks like an emu. WIZARD: I think it's a moa.

JUSTINA, REPORTER: Yeah, meet the moa. It's an up to 3.5 metre wingless bird that once roamed the plains of Middle-Earth, I mean, New Zealand. Moa disappeared around 500 years ago possibly because of human hunters, but now an American bio-tec company says they can bring them back.

BETH SHAPIRO, COLOSSAL BIOSCIENCES: The process of de-extinction is that we extract DNA from ancient bones, and we sequence that DNA and assemble ancient genomes.

DNA is like blueprint that exists inside the cells of all living things determining how they look and act. Sometimes you can also find DNA preserved in dead things.

BETH SHAPIRO, COLOSSAL BIOSCIENCES: We'll be comparing the genome sequences to genomes of living birds to identify what it is that made moa unique, and using the tools of genome editing to make those changes in the DNA sequence of the living close relatives.

And it's got a lot of moa fans excited, especially the Lord of the Rings director Peter Jackson who's invested around 23 million dollars for the project.

PETER JACKSON, FILMMAKER: It's given me more enjoyment and satisfaction than any films ever have.

HOBBITS AND WIZARD: Oh.

Colossal Biosciences is using similar techniques to try to bring back other species, like the woolly mammoth, and Tassie tiger. Then there were these guys which Colossal Biosciences claimed were the first dire wolves to be born in more than 10,000 years. Although some were sceptical.

STUART PIMM, DUKE UNIVERSITY: The claim that they have created the dire wolf is just simply rubbish. You know they've put a few, you know, dire wolf genes to create a big white dog.

Yeah, some scientists say they're not really creating an extinct animal, instead they're just making existing species look more like their long-lost relatives.

NIC RAWLENCE, OTAGO PALAEOGENETICS LABORATORY: Scientists can create genetically engineered animals but we're definitely not at the point of bringing back a 100% genetically engineered emu to look genetically identical to a moa.

There are also some people who say it's not right to try to bring back extinct species. For starters, keeping these new creatures alive takes specialised knowledge and a lot of money. Plus, some reckon all this effort could be better spent protecting species that are still alive.

WIZARD: Do not be so eager to deal out de-extinction. For even the very wise cannot see all ends.

Yes, thank you Gandalf, others say we should bring back species that we helped send into extinction and thanks to things like climate change and habitat loss, species extinctions are happening faster than ever, some reckon it might be good to have a backup plan. And let's face it, seeing a moa in the flesh could be kinda cool.

PETER JACKSON, FILMMAKER: Yeah, it's uniquely a New Zealand bird, so it's something that we've always been very fascinated with.

In any case, Colossal says it'll be about 5 to 10 years before we see any moa hatching, until then these amazing creatures will remain a fantasy.

WIZARD: Hang on, that's definitely an emu, I don't think we're in New Zealand anymore.

Sport

COMMENTATOR: Australia wins their first ever Asia Cup Championship.

Yep, the Opals have done it, winning the 2025 Championship in China. While they led at every break Japan narrowed the lead to 8 points at the final change. But the Opals came back strong.

COMMENTATOR: Big start to fourth from Issy Bourne.

Japan levelled the scores twice. But it wasn't enough to stop the Aussies who won eighty-eight to seventynine and locked in a ticket to next year's World Cup in Berlin. Now to the Tour De France. In the 15th stage of this 3000-kilometre race, Tim Wellens finished in front but Julian Alaphilippe, in third place, hadn't noticed.

COMMENTATOR: He doesn't think he's won. Surely not.

COMMENTATOR: Please tell me someone's told him.

He did think he'd won but still took it like a champion.

JULIAN ALAPHILIPPE, FRENCH CYCLIST: You have to take in on a funny way you know it's part of the game.

And Australia has taken out the Frank Worrell trophy and sealed the deal after an eventful third test. They knocked the West Indies over for just 27 - the second lowest test innings total ever. Mitchell Starc became the fastest player to take five wickets in an innings.

COMMENTATOR: That's 400 hundred test match wickets for Mitchell Starc.

And Scott Boland became the first Aussie in 15 years to take a test hat-trick.

Charity Flights

Reporter: Wren Gillett

INTRO: Now if you're from the bush, you'll know that there are a lot of great things about growing up away from the city. But there are also some down sides, especially if you need a lot of medical care. Winnie and Raffy are going to tell you how a medical flight charity has helped their family.

WINNIE: My name is Winnie, and I am 9 years old. I live in NSW Coonabarabran. Yeah.

RAFFY: I'm Raffy, 15, from Coonabarabran. Yeah.

Winnie and Raffy are siblings, and as you heard, home for them is here, in Coonabarabran. It's a rural town in New South Wales, and fewer than 3,500 people live here.

WINNIE: I'll describe my town as fairly good, but it doesn't have much in it. But yeah, I could live here for the rest of my life.

RAFFY: Living in a small country town, nearly everyone knows you, so you know, you always, every time you think you're gonna go downtown for like 10 minutes, ends up going half an hour because you're talking to nearly every person you see.

But while living in a small town might mean you're closer to your community, it's common to be far from other things.

RAFFY: Some of the harder aspects living here is, I suppose, medical facilities, schooling and especially with farming, that if you want a part or something like that, you got to drive more. More than likely you've got to drive a few hours or wait a few days for something to come.

For Winnie, that distance really matters. She has a medical condition that means she has to constantly monitor her blood sugar.

WINNIE: I'll describe it as just like if all my sugars go low, there's some possible risks that could happen. I might have to get rushed to the hospital if they're like, really, really low.

RAFFY: It does get hard in Coonabarabran because yeah, there are not many facilities here that can help her or stuff like that.

It's why she sometimes needs to fly for treatment.

GLEN BRIDGLAND, LITTLE WINGS: My job entails flying sick kids to and from hospital visits from towns in Outback NSW to the larger hospitals in Sydney and Newcastle.

Glen is a volunteer pilot for Little Wings, A charity that's been helping Winnie for a long time.

WINNIE: I feel like I've flied like a lot of times because I've been flying with them since I was like 3, I think. They have, like tiny teddies in there and I like, eat them because I'm hungry.

GLEN BRIDGLAND: If you live in the larger cities, access to medical treatment is taken as granted. But if you're in the bush that's not as easy, and for people with serious medical issues, the only way they can reach treatment is if they travel a long way. That's where we help.

RAFFY: People should be able to get the treatment they need, when they need it, and how much they need. Because I suppose everyone has the right to it and deserves it no matter who they are.

WINNIE: The other kids that have my condition, I just want to tell them never give up, and you can be whoever you want to be, and Little Wings can help you no matter what. And... yeah.

Closer

Well, that's all we've got for you today but we'll be back next week with more but if you can't wait till then you can head to our website there's plenty to see and do there. You can also catch Newsbreak every weeknight. Have an awesome week and I'll see you next time. Bye.