



Teacher Resource

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.

Flood Update

1. Where did BTN report from in this story? Find on a map of Australia.
2. What other areas on the East coast of Australia have been affected by flooding? Mark on a map.
3. What dam in Sydney overflowed?
4. How have businesses in Lismore be affected by the floods?
5. How are those affected by the floods being helped?

Flood Recovery Kids

1. How were the kids in Lismore affected by the floods?
2. What transport did the kids in Lismore use to visit their flooded house?
3. How is the Lismore community helping one another?
4. How was Charlie in Rocklea affected by the floods?
5. How did Ava and Ruby help others during the floods?

NATO History

1. What does NATO stand for?
2. How many countries are currently part of NATO?
3. Why did NATO form?
4. Ukraine wants to join NATO. True or false?
5. Why is Russia unhappy with NATO?

Women's History Month: Dorothy Hill

1. Where and when was Dorothy Hill born?
2. Dorothy was the first person in her family to go to university. True or false?
3. Dorothy Hill was a famous...
 - a. Anthropologist
 - b. Geologist
 - c. Meteorologist
4. What type of work did Dorothy Hill do during WWII?

EPISODE 7

15th March 2022

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.

5. Fill in the gaps. Dorothy Hill identified lots of new _____ species.

Tassie Tiger Return

1. In what decade did the Tasmanian tiger become extinct?
2. What caused the Tasmanian tiger to become extinct? Give one example.
3. Fill in the gaps. Scientists have mapped the Tasmanian tiger's entire _____.
4. What is the Tasmanian tiger's closest relative?
5. What type of animal is the Tasmanian tiger?
 - a. Marsupial
 - b. Monotreme
 - c. Reptile

Check out the [teacher](#) resource on the Teachers page.



Teacher Resource

Tassie Tiger Return

Focus Questions

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

1. In what decade did the Tasmanian tiger become extinct?
2. What caused the Tasmanian tiger to become extinct? Give one example.
3. Fill in the gaps. Scientists have mapped the Tasmanian tiger's entire _____.
4. What is the Tasmanian tiger's closest relative?
5. What type of animal is the Tasmanian tiger?
 - a. Marsupial
 - b. Monotreme
 - c. Reptile

Activity: Personal Response

Pre-viewing questions

Before watching the BTN Tassie Tiger Return story students will respond to the following...

- What do you already know about the Tasmanian tiger? Record your ideas on a mind map.
- Why do you think Tasmanian tigers are in the news at the moment?
- What is special about Tasmanian tigers?

After watching BTN

After watching the BTN story students will respond to the following:

- What do you THINK about what you saw in the story?
- What does this video make you WONDER?
- Think of three questions you have about the BTN story.
- What more do you want to learn about Tasmanian tigers?

Activity: Questions and Answers

All scientific discoveries start with a question! As a class, come up with some questions you think scientists ask and solve in relation to animals and what they need to survive. As a class, make a list of questions that

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KEY LEARNING

Students will develop a deeper understanding of the Tasmanian tiger and why it became extinct.

CURRICULUM

Science – Year 4

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

Science – Year 5

Living things have structural features and adaptations that help them to survive in their environment.

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.

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

Science – Year 7

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

you would like to ask a scientist (see below for some example questions). Use the internet to find answers to your class questions.

- Why did the Tasmanian tiger become extinct?
- How can scientists create life from an extinct animal?
- What is the closest living animal to the Tasmanian tiger? What are the similarities?
- Can we bring Tasmanian tigers back from extinction? Explain.
- What animals are considered for de-extinction through cloning?
- What did the Dolly the sheep experiment teach us?
- Are there reasons why we shouldn't bring animals back from extinction?

Activity: Animal factsheets

Students will learn more about the Tasmanian tiger! Students will research the following and then share their research findings with the class or create a display in the classroom.

- Name (common and scientific name)
- Biological illustration or photo
- Classification (class, family, genus)
- Description (size, colour, physical features)
- Habitat
- Diet
- Behaviours
- Adaptations
- Conservation status

Students will then choose one of the following activities to complete:

- **Artwork** - Make a list of Australian animals that are endangered or critically endangered. Some examples are the [dunnart](#), [regent honeyeater](#), [koala](#), Murray River cod or the northern quoll. Choose one animal and then create an artwork that draws attention to the endangered animal.
- **Model** – Create a 3D model of a Tasmanian tiger or another extinct animal using recycled materials. Display your model in your school. Use it to raise awareness about the threat of extinction and endangered species.
- **True or false?** – Find out as much as you can about Tasmanian tigers. Create a true or false quiz and test your classmates. Alternatively, create a word find or crossword about Tasmanian tigers.
- **Children's book or comic** – Write and illustrate either a children's book or comic which tells the story of a Tasmanian tiger.
- **Haiku** – Write a haiku poem about Tasmanian tigers.
- **Geography** – Where in the world did Tasmanian tigers live? Plot on a map.



Activity: Dreaming

Indigenous People and the Thylacine

Students will explore Indigenous people's connection to the thylacine through Aboriginal rock paintings and Dreaming stories. Aboriginal rock paintings of thylacine-like animals have been found in the Northern Territory and the Kimberly region of Western Australia. Explore some of these images [here](#).

Listen to Aunty Doris Stuart Kngwarreye [share a Dreaming story](#) of the Arrernte people from Mparntwe (Alice Springs) being guarded by Akngwelye, a thylacine.

How the Tasmanian Tiger Got Its Stripes is a Dreaming story of the Nuenonne people of Bruny Island off the coast of Tasmania. The book should be available in most libraries or to purchase.



Activity: Create your own animal!

Students will use their imagination and create their own animal species. Students will imagine they have discovered a new species of animal which has never been seen before. Use the following as a guide for this activity:

- Illustrate the new animal species using only a black felt-tip pen on a piece of A4 art paper – include as much detail as you can.
- Give the animal a common and scientific name.
- Where does it live, on land, underwater, in the soil or in the sky?
- Describe what the animal looks like – what are some of its physical characteristics?
- What do they eat?
- How does it communicate?
- How does it survive in its environment? What are its adaptations?
- Does it have any interesting or unique features?
- How possible do you think it is that your new species exists? Explain your answer.

Further investigation

Students can explore the work of artist Patricia Piccinini for inspiration, in particular, [Skywhales](#). There are [Learning Resources](#) on the NGA: Know My Name website to support teachers, which includes topics on sustainability, diversity, evolution, nurture and imagination.



NGA, Skywhales - [Source](#)

Students may want to explore new species that are being discovered. For example, the [blanket octopus](#) or the [rose-veiled fair wrasse](#). Why is it important to find and identify new species?



Useful Websites

- [Tassie Tiger Video](#) – BTN
- [Megafauna Extinction](#) – BTN
- [Extinction Report](#) – BTN
- [Thylacine](#) – Australia Museum
- [Extinction of Thylacine](#) – National Museum Australia
- [De-extinction puzzle: how decoding numbat DNA could help resurrect the Tasmanian tiger](#) – The Guardian



Teacher Resource

BTN Transcript: Episode 7- 15/3/2022

Hey, how's it going, Amelia Moseley here and you're watching BTN. Thanks for hanging out with us again, let's see what's coming up on today's show. We meet some kids who are cleaning up after the floods, find out how the thylacine could be seen again, and hear the story of another amazing Aussie for Women's History Month.

Flood Update

Reporter: Cale Matthews

INTRO: Now, as a lot of you know, it's been a really tough few weeks for many people in Australia's east. There have been more deadly floods and many communities are just starting to get an idea of how bad the damage is. Cale went to Northern New South Wales to find out more about what's happening. Over to you Cale.

G'day everyone I'm here in Lismore in Northern New South Wales which you can probably see has been hit hard by the recent floods. Now the water level has gone down but if we come over here, you can kind of see on the walls just where the water got underneath the paint, it's kind of lifted it out. And then if you look up above me, that dark blue line there is where the water level reached. That's way above my head.

It's not just in Lismore though, much of the east coast of Australia has been hit hard by the floods. Last week, heavy rain turned streets into rivers across Sydney as the Manly dam overflowed and thousands of people were told to evacuate their homes.

RESIDENT: Yeah, well yesterday we kayaked down here, and we kayaked through our house to the inside.

RESIDENT: Kids just started crying seeing their family home completely filled with water, all their toys and bikes and everything out the back gone.

More than 20 people have died and there's been billions of dollars' worth of damage. Heaps of the businesses here on the main street in Lismore are just completely empty because they've had to throw everything out and some of them say they won't be able re-open. The Prime Minister has declared the floods a national emergency which means the government will be able to send money and resources to flood affected towns more easily.

SCOTT MORRISON, PRIME MINISTER: Economic support, mental health support, helping businesses get back up on their feet.

But a lot of people across northern New South Wales say, so far, they haven't really had enough help.

RESIDENT: People are getting antsy; we're needing people on the ground and help.

RESIDENT: The community has been the hero in this disaster not the government.

During the floods a lot of local people stepped in to help emergency services and saved a lot of lives. And afterwards, a lot of the clean-up is being done by the community. The Australian Defence Force have been

down in the Northern Rivers to help locals out. There's also a convoy of mobile homes that are being sent up here for people who've lost their houses to stay in.

EMERGENCY SERVICES SUPPORT: I just can't imagine what it's like to have nothing. The slightest little thing you can do to help, you want to help.

It's going to take long time for towns like Lismore to get back to normal and the locals are going to need a lot of help. Back to you Amelia.

Flood Recovery Kids

Rookie Reporters

INTRO: Thanks for that Cale. Well, as you just saw, the floods have been really devastating for a lot of people. We've checked in with some kids from flood affected areas to find out how they're going and what it takes to get back on your feet after a natural disaster like this one. Take a look.

OPI: Hi BTN I'm Opi.

JACKSON: I'm Jackson.

OSCAR: I'm Oscar.

OPI: And we live in Lismore New South Wales. Here in Lismore, we've had, like a lot of rain and like a lot of big floods.

JACKSON: I woke up and I came out and it was so high. Like I couldn't even see the baseball fields down our street.

OSCAR: We were woken up at 4am by my dad and my poppy and he brought me to his house to evacuate from the flood. I was amazed because I didn't think that I would ever experience that, because I knew it was going to be a flood but I would never think that it would be as big as this.

OSCAR: This nice guy, mum asked him if we could go in a canoe to see our home, and so then we went in our canoe and it was pretty scary because it was pretty wobbly and we were like, Oh, we're not gonna tip are we, but we didn't so it was fine. And my mum went on the steps to get to our house and there's only two steps because the rest of the steps were underwater. The thing I was mostly sad about was all my books that were gone.

OPI: This is a really bad event. But I suppose in a way, it's kind of also brought our community together a bit. People just coming together and handing out free food and like, you know, offering to do peoples like basic needs, like laundry and dishes and stuff like that.

CHARLEE: I'm Charlee Cannon and you're watching Behind the News. Today I'm going to talk to you about the crazy weather. So, when it was raining a lot, it flooded the city and Rocklea, so that's where we live. And then we had to go as soon as we can, and when we left, we found a hotel. And we stayed in the hotel for one week. I felt a little bit worried because I didn't know what was going to happen. All the trash is because of the floods and all the trees are covered in mud. This whole area was flooded, and it would have been up to my head and if I was here, I would have been swimming in the flood.

AVA: Hi, BTN. I'm Ava.

RUBY: And I'm Ruby. We live in the Channon in northern New South Wales, and we've been helping out at

this makeshift evacuation centre for the past week.

AVA: We've been packing bags with like essential foods like pasta and beans and some fresh fruit, because people's gardens have like been damaged by the rain and also like sanitary bags, with like shampoo and soap and deodorant and stuff.

RUBY: So, this is like an inventory of everything that we've been donated here at the evacuation centre. It's kind of a list for what we need to put in each bag. We've been delivering items from people's 4 wheel drives; motorbikes were a big one and we had a ropes crew who came in and put a flying fox on a road where the causeway was washed away and there was no access. So, we could get food over and people over on that which was really cool.

AVA: When the floods came through, we didn't really know it was going to be as bad as it was.

RUBY: We live in between two causeways, and we went out and we couldn't go anywhere.

AVA: Up near rose road there is a big like landslide that took the road away and a bit past that is a like huge crack up to someone's knees.

RUBY: There's been a lot of community spirit with people connecting with people that haven't connected before even though they've lived in the same area for most of their lives.

CHARLEE: I'm praying for all of you that lost your houses and food and I hope that you get all that back.

JACKSON: After this, the town could be even more better than it was. We just all have to work together and do what we can.

News Quiz

A very famous shipwreck has been found beneath Antarctica's Weddell Sea. Do you know its name? Is it the Endeavour or the Endurance? It's the Endurance. It was sailed by famous British explorer Sir Ernest Shackleton on an expedition to Antarctica, but it got stuck in the ice and sank in 1915. The whole team survived and wrote down the ship's co-ordinates in case it could be found one day and now it has, thanks to the engineers and scientists of the Endurance 22 Expedition.

ENDURANCE EXPEDITIONER: When the expedition discovered it, it was like a miracle, we could not believe the state of the ship. I think it looks much as it did that day. When Shackleton saw it, he wrote in his diary, "I don't think I can write about it", he was so depressed. But I think he would be so happy that now that wasn't the end of Endurance, that was just the end of a chapter and now a whole new chapter can begin.

Which of these burger chains has temporarily shut up shop in Russia? It's this one. McDonalds decided to stop trading in Russia as a protest against its invasion of Ukraine. It joins a whole bunch of US-based companies which have done the same.

An English football club has been affected by sanctions against Russia over the war in Ukraine. Do you know which one it is? Manchester United, Newcastle or Chelsea? It's Chelsea. The team is owned by a Russian billionaire who's been sanctioned by the British government. While the team can still play the club's been banned from selling match tickets or merchandise.

World music and dance lovers have spent the weekend at Australia's WOMAD festival. Which city is it held in? It's in Adelaide. This year was WOMADelaide's 30th anniversary and after a year of COVID restrictions lots of people were keen to enjoy acts from around the world.

KID 1: It's just awesome, like the whole vibe is just great.

KID 2: We just come here to have fun and just see lots of shows.

KID 3: I love hearing all the different kinds of music people like.

NATO History

Reporter: Amal Wehbe

INTRO: Now, if you've been following news about the war in Ukraine, there's a word you might have heard a few times and that's NATO. It's a military alliance between a group of countries and Amal found out what NATO and its history has to do with the conflict that's going on right now.

HARRY TRUMAN, 33RD US PRESIDENT: If there is anything certain today, it is the will of the people of the world for freedom and for peace.

This was the moment in 1949 when NATO was born. NATO stands for North Atlantic Treaty Organisation. It's a military alliance that now includes 30 countries which have all agreed to share military power and to defend each other if any is attacked. And over the years it's played a big role in many different conflicts and peace agreements. But to find out what NATO has to do with the current conflict in Ukraine, you have to go back to its beginnings at the start of the Cold War.

That's a period of tension between the United States and the Soviet Union or USSR, an enormous country which formed in 1922 and included modern day Russia and Ukraine. The USSR fought with the US and its allies in the Second World War and helped to defeat Nazi Germany. But after the war its influence grew and many countries in the West started to see it as a threat. You see the USSR had a very different system of government. It was based on communism, the idea that everyone should have an equal share of the wealth they create. But the government controlled many aspects of people's lives and opposition was often met with violence. Like the US the USSR had also developed nuclear weapons.

Meanwhile, many European countries were left weak after the war. So, they decided to form an alliance with the US and Canada to protect themselves against the USSR and to promote and defend democratic values. Over the years the Soviet Union got weaker. And eventually it collapsed. The USSR dissolved into 15 countries including Ukraine and Russia.

But this wasn't the end of NATO. In fact, it continued to grow. And some countries that used to be a part of the USSR became members. Ukraine has also tried to join NATO. But that's something Russia's president Vladimir Putin wants to stop from ever happening. He sees NATO as an anti-Russian organisation and a threat to Russia's security and he says NATO has betrayed Russia by expanding to the east. Before the war in Ukraine started, Putin demanded a promise from NATO to never let Ukraine join. And now he's demanding NATO stay out of it.

VLADMIR PUTIN, RUSSIA'S PRESIDENT: Whoever tries to hinder us should know that Russia's response will be immediate, and it will lead to such consequences that you have never encountered in your history.

NATO has sent in troops to nearby countries. And it's given weapons and humanitarian aid to Ukraine. Many want it to do more. But NATO says it won't get actively involved in the fighting, because then a war between two countries could become a much bigger war.

JENS STOLTENBERG, NATO SECRETARY GENERAL: We have a responsibility to ensure the conflict does not escalate and spread beyond Ukraine.

NATO has strongly condemned Russia's actions as have leaders of NATO countries.

BORIS JOHNSON, UK'S PRIME MINISTER: The people of the United Kingdom stand with our Ukrainian brothers and sisters in the face of this unjustifiable assault on your homeland.

Meanwhile, Ukrainians say they'll continue to do everything they can to fight for their homeland.

Quiz

Which of these countries is not a NATO member? Is it the UK, Turkey or Australia? It's Australia.

Women's History Month: Dorothy Hill

Rookie Reporter: Cara

Let me introduce you to Dorothy Hill. She was born in Brisbane in 1907 and she loved going to school. She was really into sport, English, history and most of all science. Dorothy became the first person in her whole family to go to university; something that was really uncommon for women at the time. She won a scholarship to Queensland Uni and studied geology. Learning all about the Earth, how it formed, how it's changed over time and its many rocks and minerals.

In 1928, Dorothy was awarded a gold medal for being the most outstanding graduate, the first woman at Queensland Uni to get that honour. But Dorothy still hadn't had enough of studying. She won another scholarship to Cambridge University in England, one of the top unis in the whole world. She became a ground breaking geologist and palaeontologist, especially in the field of coral fossils.

During World War Two she turned her attention to a different topic. She served in the Women's Royal Australian Naval Service deciphering secret codes to communicate between ships.

Later Dorothy became a lecturer at Queensland Uni and then a professor. Australia's very first female uni professor, in fact. She also became the first female president of the Australian Academy of Science, the first Aussie woman to become a fellow of the Royal Society and served on the committee that would later become the Australian Coral Reef Society. It was the first organisation to promote study and protection of the Great Barrier Reef.

Dorothy helped create this marine research station off the coast of Queensland and she identified lots of new coral species that hadn't been known to science before. Throughout her life, she also worked hard to get more women into science degrees and today there's even an award named after her that honours top female earth and marine scientists. So, let's all thank pioneering Professor Dorothy Hill for helping lead the way.

Sport

It doesn't get much bigger than the Beijing Winter Paralympics closing ceremony. 30,000 people were in the crowd and around 1,000 athletes took part. It capped off 9 days of events, which saw host nation, China come out on top with 18 gold and a total of 63 medals. Ukraine finished in second and got some big cheers from around the world. While Australia picked up just one medal during the games a bronze which was claimed by Ben Tudhope in the snowboard cross.

141 runs. That's the massive total Australia's thrashed New Zealand by in the Women's World Cup. The Aussies had a tough start at one point they were 3 for 56. But they quickly turned things around making

269 and bowling New Zealand out for just 128. So far, they're three wins from three in the tournament. Go Aussies.

And Adelaide's taken out the AFLW minor premiership for the second year in a row after smashing St Kilda 53 to 14. It's been a great season for the Crows. They've only lost one game and a better percentage left them on top of the ladder and only one win away from hosting their third grand final. So, watch this space.

And check this out, it's the second biggest cross-country skiing event in the world. The Engadin Ski Marathon in Switzerland. More than 11,000 competitors from 40 countries lined up to take part in the 42 kilometre race. Phew I'm tired just watching them.

Tassie Tiger Return

Reporter: Amelia Moseley

INTRO: Finally, today, to Tasmanian tigers. We all know they're extinct, right? But what if they weren't. No, no-ones managed to find one, but there are some scientists who are seriously working on bringing them back to life. Let's find out more.

This is the Tasmanian tiger or thylacine. I'm guessing you've never seen one in the wild because it's been extinct for nearly a hundred years. Although...

TASMANIAN RESIDENT, 1977: It was a peachy colour, peachy fawny colour with very dark stripes.

PARK RANGER, 1995: Looked about half the size of a German shepherd.

JOURNALIST, 1970s: What did it sound like?

TASMANIAN TIGER SPOTTER, 1970s: Oh, sort of a growling, gargling noise.

TASMANIAN SCIENTIST, 1977: Someone saw one in a carpark somewhere a few years ago. I mean this is obviously nonsense. They don't come into carparks.

Uh, despite the many sightings over the years, there's no actual proof anyone's seen a Tasmanian tiger since the last one died in the 1930s after many years of hunting, diseases and habitat loss.

AMELIA, REPORTER: But what if we could see a Tassie tiger again? What if we could bring back an extinct species using DNA and cloning? This plotline sounds very familiar. Nope, can't think of it.

Well, it might sound like a movie, but real life Aussie scientists at Melbourne Uni have a plan to bring back the T-Rex. Wait, no, I mean the Tassie tiger.

PROFESSOR ANDREW PASK, UNIVERSITY OF MELBOURNE: Now, it's very much, you know, no longer science fiction, but really a science fact that we have the technology to do this.

They've just been given a 5 million dollar donation to make the thylacine in a lab. By studying old specimens from museums, they've mapped the marsupial's entire DNA which is like nature's blueprint. But...

PROFESSOR ANDREW PASK, THYLACINE RESEARCH LAB: So, we still can't create life from a dead piece of tissue or an extinct animal. So, what we have to do is start with something that's living first, and then turn that into a thylacine. So, we find the closest living relative that's around today.

Enter the dunnart. It's a marsupial too with really similar DNA to the Tassie tiger. They can take some of its

cells, edit them, so to speak, and use them to create a living thylacine cell. Then they'll use cloning techniques to make a baby thylacine that a similar marsupial can give birth to. Phew, easy, right? Well, it would be a world first, but this sort of thing has been done before. This recently extinct species, the Pyrenean ibex was brought back to life in Spain in 2009, by cloning frozen cells although it only lived a few minutes before becoming extinct, again. There are also plans to bring back the woolly mammoth using elephant DNA. Wow. So, Aussie scientists are hopeful.

AXEL NEWTON, THYLACINE RESEARCH LAB: The prospect of having one, like, in real life is just, it's mind blowing.

Of course, not everyone agrees bringing species back from the dead is such a great idea. Some reckon more money should be spent on animals that are, you know, still alive. But these scientists say de-extinction could be a huge help for conservation in the future by giving species a second chance at life. Well, some species, anyway.

ANDREW PASK, PROFESSOR, THYLACINE RESEARCH LAB: For dinosaurs there's no DNA left in dinosaur bones. So, we don't have to worry about a Jurassic Park happening. But for more recently extinct animals, we can certainly. Anything is within the realm of bringing back.

JOE, REPORTER: But life, ah, finds a way.

AMELIA, REPORTER: Ah no, we're not doing that in this story. It's been done before, Joe.

JOE, REPORTER: Alright.

JACK, REPORTER: Guys, guys I'm ready. Where are you going? Why does this always happen to me.

Closer

Well, that's all we've got for today, but we'll be back before you know it. In the meantime, you can check out Newsbreak every weeknight. Plus, there's heaps to see and do on our website and if you're 13 or over don't forget you can subscribe to our YouTube channel for even more content. Have an awesome week, stay safe, look after each other and I'll see you soon. Bye.