# BtN: Episode 16 Transcript 14/06/16

Hello, I'm Nathan and you're watching BtN.

Coming up today:

- Storms cause huge damage along the east coast of Australia. We find out why.
- Why this new movie could spell disaster for the fish it's based on.
- And join Rookie Reporter Maya as she prepares for the campaign trail with tips from some of the best in the business.

All of that soon, but first.

# **US Shooting**

Reporter: Carl Smith

INTRO: There's been some really bad news out of America. A shooting worse than ever seen there before. Here's the info you need to know.

At about 2am local time Sunday morning a gunman began firing on people inside this club in Orlando, Florida. Police raced to the scene. And in the early morning stormed the venue to free about 30 hostages still inside. At least 50 people were killed in the attack and another 53 injured. The attacker, US citizen Omar Mateen, died fighting the police.

Health workers, counsellors, and the government have been working through the night to help the victims and their families.

BUDDY DYER, MAYOR ORLANDO: This is probably the most difficult day in the history of Orlando.

President Barack Obama says the shooting was an act of both terror and hate.

PRESIDENT OBAMA: Attacks on any Americans regardless of race, ethnicity, religion or sexual orientation is an attack on all of us and the fundamental values of equality and dignity that define us as a country.

Across the US flags are at half mast and many are attending vigils for those killed. But Australia's PM says violence like this is unlikely to happen here, partly because we have laws that prevent people owning guns like the ones used in the shooting.

PM TURNBULL: Our security and police forces are vigilant, in ensuring that we are protected against this type of extremism, this type of violence.

Presenter: Now obviously that is a really upsetting story to hear about. So if it's made you feel worried or anxious, for any reason, we have some info on our website that will help. You can find the link on our front page right now.

## **Animal Testing**

Reporter: Nic Maher

INTRO: The Australian Government has announced that testing cosmetic products on animals will be made illegal in Australia by July next year. The plan also includes a ban on any new products that have been tested on animals overseas too. Here's the details.

In the cosmetic business, beauty is the name of the game. Every year, it's estimated people around the world spend more than 250 billion dollars on gels, sprays and pastes that promise a better, more attractive you.

But before any of those products hits the shelves, companies have to make sure they're safe to use. And that's where you find the ugly side of the beauty business.

It all started mid-way through last century when beauty products started becoming really popular. Lots of new products hit the market, but there weren't many rules around to make sure they were safe. So, some people got burned, scarred or even worse from trying out dodgy ones. It forced countries like the United States to introduce laws that forced cosmetics companies to make sure their products were safe before they could be sold. At the time, they decided the easiest way to do that was to test them on animals, like rats, rabbits, dogs, cats and guinea pigs. Researchers would put the substances on their skin, to look for blistering or scarring, or in their eyes, to test for redness or burning.

In the 80s, word about animal testing got out, and over time angry customers forced companies to look for new ways to test products. Now, there are a number of alternatives, like people donating tissue samples, testing on artificial skin and body parts in a lab, or simply using ingredients that are already known to be safe. You can look for labels like these to check if the products you buy are cruelty free or not.

But despite the alternatives, animal testing is still legal in most countries around the world. In some places like China, imported cosmetics actually have to be tested on animals before they can be sold there.

Here in Australia animal testing doesn't happen anymore, but it is still legal and on the shelves you can still find heaps of items tested on animals overseas too. That's why the Government has now stepped in. The Government announced that by July next year animal testing for cosmetics would be officially banned in Australia. The ban will also apply to new cosmetic products tested on animals overseas but not items which are already stocked in shops. The Government hopes those items will be gradually phased out by the companies that make them as well. The Opposition says it agrees with the changes and has promised to bring in similar laws if elected.

And hopefully one day, no more animals will need to suffer in the name of beauty.

### This Week in News

Residents are still recovering and counting the cost after storms hit the east coast last week. In Tasmania floods have taken a big toll.

Livestock have drowned, bridges and roads have been severely damaged and many buildings were drenched or swept away. One person died and two are still missing.

The PM and Opposition leader both suspended their campaigns and flew down to Tasmania to offer their support. Many residents are also flocking to the worst hit parts of the state to help with the clean up.

And almost 600 people have received Queen's Birthday honours for their achievements and work for the community. The prestigious awards were set up by the Queen back in the 1970s to honour Australians doing great things.

This year there were Indigenous leaders like Warren Mundine, pop stars like Kate Cebrano, governors, sporting heroes and even the guy who helped switch Australia over to the decimal currency system almost 50 years ago, his name, Neil Davey.

### Storm Erosion

Reporter: Carl Smith

INTRO: Now as you saw there, storms and flooding caused huge problems across eastern Australia last week. The damage was particularly bad along the coastline where many homes were badly damaged. Here's why.

From Queensland right down to Tasmania, Australia's eastern coast took a battering during these huge storms recently. Gardens and decks were pulled apart, houses were damaged beyond repair, even an in ground pool couldn't withstand the waves.

Big storms aren't rare in Australia. But this one seemed to do more damage along the coast than most others. So why was that? Well there were two major factors that combined to make this storm so destructive. The first was erosion.

REPORTER: And to show you how erosion works, I've set up a little experiment for you. In this tub we have sand and water just like you might see at the beach. And if I use this paddle and start making some waves, like the bigger waves we've seen along the east coast of Australia lately, you can see the shape of the beach starts to change. It even starts to crumble and fall apart.

Erosion is a natural force and it's something that's constantly happening all around us. It's part of a cycle that forms coasts, shapes mountain ranges, and digs out caves. But during unusually violent weather like this it happens much faster as lots of rain runs out to sea and waves pound hard against the beach.

But there was another factor that made the erosion much worse during this storm. The unfortunate timing of a king tide. Tides are the movement of the sea up and

down each day. That happens mainly because of the moon. The moon's gravity pulls at the Earth, causing a small bulge in the water closest to where the moon is in the sky. As the Earth rotates, and the moon moves around it, that bulge moves around the Earth creating our high and low tides.

But every now and again the sun lines up with the moon and their gravity combines to pull on our oceans even more. That makes something known as a king tide. So if we pretend we've got a king tide in this tub.

REPORTER: With higher water waves can wash away beaches even faster.

Lately many scientists have been particularly worried about erosion along Australia's coastal areas. They say there are now more buildings along the beach but fewer plants holding the dunes together. That's why groups like this are stepping in to help secure our coastlines.

REPORTER: So on windy, rainy days like this, how can these little plants help hold the dunes together?

KID 1: Well I think once you've planted the plants, like after a while, the roots kind of sink in so if the wind's damaging the sand, the roots will kind of hold it together.

KID 2: Because the roots like here are holding all the dirt and sand together. And that will actually help our sand dunes when they hold it all together so it doesn't just erode away.

More vegetation is one thing but some researchers say we really need to stop building so close to the beach. Because big storms and the erosion that comes with them are a very natural part of life in Australia.

### Quiz

How many minutes does the time of a high tide change by each day?

2 minutes

50 minutes

1000 minutes

Answer: 50 minutes

# Dory in Danger

Reporter: Nic Maher

INTRO: Australian researchers are worried fans of the soon-to-be-released film Finding Dory might add to the woes of Dory's real world species the blue tang. When

the original Finding Nemo was released, the population of the clownfish suffered because too many people wanted their own Nemo as a pet. Now they fear a similar result for Dory's relatives.

Thirteen years ago a very famous clownfish first swam across our screens on a mission to find his son Nemo. But researchers at Flinders Uni and the University of Queensland say Finding Nemo ended up causing more abductions, just like this. Even though the story is all about a fish trying to escape captivity, the movie actually inspired more people to keep clownfish as pets and that meant more were taken from the wild to keep up with the demand. Even now, conservationists say more than 1 million clownfish are taken from their homes every year. That's why these students have a program to keep these tropical fish at their school.

STUDENT 1: Hi my name's Taylor I'm a BG ranger, come and check out our cool environmental classroom reef-ugee.

STUDENT 2: At school we breed clownfish and every clownfish we breed and sell is one less taken off the reef.

STUDENT 3: These are some of the baby clownfish we bred last year.

STUDENT 2: This is marine green frozen food for the fish.

STUDENT 1: We also teach visitors that come to our school the importance of the Great Barrier Reef and how to care for it.

Now, there's a sequel on the way also starring Dory, the blue tang. Those same researchers are worried that if this movie becomes as popular as the original it could mean thousands of real blue tangs end up right where Nemo did, in someone's fish tank.

Unlike goldfish, which are mostly bred in captivity, many tropical fish species, like the blue tang, find it really hard to reproduce in captivity, or they can't at all. So that means they're plucked from the oceans just like Nemo.

Researchers say around 90% of the tropical fish you see in pet shops were taken from the wild and many of those collected don't even survive the trip. When fish like Dory do survive and end up in tanks, it can still end badly.

STUDENT 3: This is the blue tang. Blue tangs are very hard to keep alive in fish tanks because they can get diseases very easily.

It's a big reason why these guys are making such a big effort to protect tropical fish.

STUDENT 1: It is okay to have a tropical fish as long as there is a limit of fish being caught.

STUDENT 4: Well, when you're buying the tropical fish from a pet store you have to ask how hard it is to look after, if it's captive bred and if you can keep it in a tank.

So although these colourful characters are pretty to look at, conservationists say it's better for fans to take home the movie's real message and leave plenty of Nemo's and Dory's in their natural habitat.

### Quiz

Where is a fish's dorsal fin located?

on the top

the side

or the back

The answer is: The top of the fish

### HMAS Sydney 3D

Reporter: Carl Smith

INTRO: Deep down off the coast of Western Australia lie two 75-year old shipwrecks, the HMAS Sydney and a German ship that battled it during World War II. In 2008 the ships were discovered after a long search. But since then very few people have been able to see them. Now 3D technology and the fastest computer in the southern hemisphere are helping to bring the Sydney back from the deep for others to enjoy.

At the height of the Second World War, one of the most famous and successful ships in the Australian Navy, the HMAS Sydney, set out for home after protecting troop ships around Asia. But just 200 kilometres from Western Australia the Sydney was attacked by a German ship called the Kormoran. Both ships were sunk and more than 700 men died. It was, and still is, the worst naval disaster in Australian history.

For almost 70 years the Sydney and the Kormoran lay undiscovered somewhere in the Indian Ocean, until this moment in 2008. These are the first rough images of the shipwrecks 2,500 metres below the sea. Now, eight years later, the researchers have come back for a closer look at the ships. In fact, a MUCH closer look!

ANDREW WOODS, RESEARCH ENGINEER: We've collected around half a million photographs and around 300 hours of high-definition video and much of that in 3D.

So why all the filming? Well two and a half kays is too far below the sea for most people to visit. So instead, the researchers came up with a pretty sophisticated way to bring HMAS Sydney back up onto dry land. This is a full 3D recreation of the HMAS Sydney as it sits on the bottom of the ocean. But being able to create 3D images like this is no easy feat.

ANDREW WOODS: The amount of time it would take for us to process half a million photographs using our conventional techniques, using our standard computer would

take about 1,000 years. So, we needed to do something to bring that time down to something achievable. So they got some help from Magnus.

DAVID SCHIBECI, PAWSEY SUPERCOMPUTING CENTRE: If you gave all eight billion people on the planet a hand calculator, it would take them over 10 years to do what Magnus does in a second.

Magnus is a giant super computer. In fact, it's the biggest in the Southern hemisphere. These rows and rows of computers are all linked up and they work together to stitch information, like images from the Sydney, together. And now not only do they have a 3D recreation of the ship, all that information could now be used to 3D print a real life replica too. The HMAS Sydney has had a long, important and tragic story. But now its full story will be easier for the next generation of Australians to learn about.

### **SPORT**

Europe's biggest Football tournament the Euros kicked off this week and host nation France got off to a perfect start. They beat Romania 2-1 thanks to this stunner from Dmitry Payet in the dying minutes.

COMMENTATOR: Oh what a way to win it. Dimitry Payet. Brilliant, typically brilliant.

However the tournament has seen some controversy off the pitch. There's been clashes between different sets of fans in the streets and in the stadium at the England/Russia match.

South America's also in the middle of their major international soccer tournament, the Copa America, and superstar Lionel Messi has provided the highlight so far. In Argentina's match against Panama Messi was subbed on with just 30 minutes to go and went on to score 3 goals sending the commentators crazy.

COMMENTATOR: Messi, Messi, Messi, Messi, Messi, Messi.

Back home and GWS celebrated their 100th game in the AFL on Sunday with a big win over local rivals Sydney. But it was the action at half time that stole the show. This very lucky and very skilled fan pulled off this amazing trick shot to win a whopping 100 thousand dollar prize.

And last up. If you're ever looking for a creative excuse to explain why you lost try getting some advice from Sebastian Vettel. Over the weekend he lost to Lewis Hamilton in the Canadian Grand Prix and blamed it on having to slow down for a couple of seagulls who were hanging out on the race track.

# Rookie Reporter Boot Camp

Reporter: Maya, Rookie Reporter

INTRO: Finally. Last week you got to meet Maya BtN's new Rookie Reporter for the first time. Well since then she's been preparing to hit the trail. But first she stopped into the ABC to get some advice on what it takes to be a great political reporter. Take a look.

LEIGH SALES: Hope you can join me for 730, right after the news. Now, who is Maya? Can you come over here please? I've got something I want to tell you. Come in, closer. Don't be scared of me. Listen, you are our new rookie reporter! Congratulations!

MAYA, ROOKIE REPORT: Thank you!

LEIGH SALES: Happy to accept the job?

MAYA, ROOKIE REPORTER: Yeah, I don't even know what to say now.

LEIGH SALES: You don't have to say anything. I'm going to see you next week. You're going to have boot camp. You're going to learn everything you want to do. How to grill politicians and how to make stories. Yeah, it will be really good. Well congratulations, welcome to the team

MAYA, ROOKIE REPORT: When I found out I was going to be BTN's reporter for the election I just couldn't believe it.

I applied for the job because my English teacher told me that was a great opportunity and I agreed because you got to interview politicians, reporters and get behind the scenes of BTN which I've been watching for years.

Being an election reporter involves a lot of different skills. You have to be able to talk to politicians, ask the hard questions, hunt down stories, work out what the biggest news of the day is and be across every issue so you know exactly what you're talking about.

MAYA, ROOKIE REPORTER: But I don't know how to do any of those things!

So to find out how it's done, I went to get tips from some people with heaps of experience. This is Leigh Sales. Nearly every day she interviews major politicians live and is known for always asking them the tough questions.

LEIGH SALES: I am asking you a question about what do you think, what do you think, what do you think has happened that you have lost that ginormous chunk of approval.

She told me that it's really important to keep your own opinions out of the story because you need to let the audience make up their own mind on the issues.

LEIGH SALES: So for example, you might be interviewing someone who you share their opinion on something so then you have to put yourself in the shoes of someone who doesn't hold that opinion so that you can pick apart their argument.

MAYA, ROOKIE REPORTER: Doing research before interviews is super important too. You have to have the right facts in your head otherwise you won't have the right questions to ask. That's something I learnt from Emma Alberici.

EMMA ALBERICI: I'll talk to lots of people, if it's a politician I'll speak to people he works with, and then also we have an awesome library here news library that can do very quick searchers of articles where the issue has been talked about.

Meanwhile Jeremy Fernandez works on live TV so he has to be really good at thinking on his feet.

JEREMY FERNANDEZ: Live news is one of the scariest and most fun things to do because things are happening now and to be honest, a lot of the time even we don't know what's going on, we can't really confirm. One of the things we do is to try to bring people the most up to date information of course behind the scenes we're trying to verify what's going on and we just tell people this is what we know, this is what we don't know and this is what we're trying to find out.

MAYA, ROOKIE REPORTER: After speaking to these people I'm feeling pretty confident about being a political reporter. Over the next few weeks I'll be out hunting down politicians and trying to ask them a lot questions that you've sent me. My aim is to find out how their plans will affect the kids of Australia. Wish me luck!

### **CLOSER**

Thanks Maya. And just a reminder, we're still running Maya's Rookie Reporter election survey on our website. So if you haven't already please jump on to tell her what question you'd like to ask the nation's biggest politicians and what subjects you'd like to hear about most during the last few weeks of the campaign. And tune in next week for her first report from the campaign trail. That's it for today. See you next time.