









Introduction 3 Discussion Points to Engage the Class 3 After Viewing Bushwhacked! Episode I – Wedge-Tailed Eagle 3 Episode 2 – Pygmy Croc Episode 3 – Humpback Whale Episode 4 – Albino Kangaroo Episode 5 – Croc Island Rangers 5 Episode 6 – Croc Eggs 6 Episode 7 – Inland Taipan 6 Episode 8 – Bull Sharks 7 Episode 9 – Platypus 7 Episode 10 – Wolf Spider 8 Episode II – Hairy-Nosed Wombats 8 Episode 12 – Cone Snails 9 Episode 13 – Dingoes 9



Introduction

These synopses can be read and discussed by the class before viewing the episode. They provide details about the locations, animals and Indigenous peoples explored in each episode as well as providing points for discussion so that the students have some background information.

Discussion points to engage the class after viewing episodes of Bushwhacked!

What was Kayne's mission in this episode?

Which animal featured in his mission? What type of animal was it and did it pose any danger to the boys?

Were there any endangered animals or habitats in this episode?

What part of Australia did this episode mainly take place in?

Describe the work of the scientists and rangers depicted in this episode.

What environmental issues or threats did Kayne and Kamil find out about?

What did you learn about Indigenous Australians from this episode?





Episode I - Wedge-Tailed Eagle

Kayne and Kamil are on a soaring mission from Perth to Lorna Glen deep in the Western Australia desert, where Kayne must follow and observe the movements of a wedge-tailed eagle. Lorna Glen is a very large remote cattle station which has been transformed into a giant wildlife park.

The wedge-tailed eagle is the largest bird of prey in Australia. Its wingspan can reach an amazing 2.5 metres. Its name comes from its unmistakable diamond-shaped tail. It can soar for hours without a wing beat – reaching the altitude of small aircraft. Each breeding pair patrols a hunting area of 100 square kilometres, but the movements of the birds have mostly remained a mystery until now. Ultimate birdman Simon Cherriman has pioneered a new way of studying the wedge-tailed eagle – by attaching a GPS device onto the bird, a bit like a backpack.

Kamil believes this a great opportunity for his cohost Kayne to attempt to tail a wedge-tailed eagle. First Kayne has to find one. Along the route he gets some help from the local Martu mob, who are busy hunting a goanna for bush tucker – prized food for the Wedgie. The Goanna is Kamil's totem animal so he is not allowed to hunt or eat it, but Kayne tries it and pronounces it delicious.

Simon Cherriman shows the boys Carnaby's cockatoo chicks in a nesting box. These have been set up because there are not enough holes in trees to nest in. Carnaby's cockatoos are a threatened species because their habitats are being destroyed by clearing of land, which removes old trees that have the hollows they need.

At Lorna Glen, Dr Colleen Sims – a wildlife expert on the station – shows the boys a threatened species of marsupial.





Episode 2 – Pygmy Croc

Kayne and Kamil visit the Bullo River escarpment in the Northern Territory to find an endangered pygmy crocodile.

100,000 years ago, when large parts of Australia were covered in water, freshwater crocodiles roamed far and wide across the continent. As the water receded, the crocodiles' populations followed the receding water to the coasts and inland rivers. All except one group.

A population of freshwater crocs remained in the pools and streams high on the Bullo River plateau, over time becoming a unique ecological species while adapting to the isolated environment. They reach a maximum size of only 1.5 metres. Typically, male freshwater crocodiles grow to a maximum of 3 metres while females grow to a maximum of 2.1 metres.

Kamil has challenged Kayne to catch a croc barehanded and, with the help of a zoologist from Charles Darwin University, take a DNA sample.

Along the way, the boys are taken on a trip by Indigenous Jarwen ranger Jamie Booked to see 80,000-year-old Aboriginal artwork.

In order to take a tissue sample, Kayne must first venture deep into an escarpment and wade through croc-infested water.



Episode 3 – Humpback Whale

Kayne and Kamil are on the track of a humpback whale as the whales migrate down the coast from Queensland to the Arctic.

The humpback whale is one of the largest animals on the planet and also one of the most acrobatic, known for breaching high out of the water.

The species was close to extinction until whaling ceased in 1963 and, while the species has started to recover, there's still a long way to go. Alarmingly, the population off the east coast of Australia is less than 60 per cent of its estimated mass before the whaling era.

By analysing whale blow and blubber, PhD student Fletcher Mingramm is researching the reproductive and health status of the humpback whale. But to get the blow, he needs to get the boat right alongside a surfacing whale and catch the spray expelled by the blowhole – the perfect opportunity for Kayne to take a humpback shower!

While waiting for the weather to fine up so that they can get out onto the water, the presenters visit the local Gubbi Gubbi tribe and take part in a traditional dance. They also enjoy the telling of a traditional dreamtime story by Josh Walker, one of the dancers.



Episode 4 – Albino Kangaroo

In a needle-in-a-haystack mission, the boys are in a hot air balloon above Canberra to spot an incredibly elusive and rare albino kangaroo.

Kangaroos are our ultimate iconic native animal. They're a major attraction for international tourists and there are more kangaroos than people roaming our fair country! But there are very few albino kangaroos.

Albinism in humans is extremely rare – 1 in 20,000 – and it is estimated these odds are similar for animals, including kangaroos. It is effectively a shortage in melanin, which results in the absence of pigmentation in the skin, hair and eyes, rendering them virtually white.

From a hot air balloon, Kayne is challenged to the nigh-impossible task of spotting one of these albino mammals in the wild. There's every chance this mission may need more than a little patience...and a plan B when Canberra doesn't deliver the goods.

ACT parks and conservation ranger Kie Barratt shows the boys how kangaroos are hunted by Aboriginal people using a spear and a wungga.

They also get to see rare southern brush-tail rock wallabies – of which there are only 80 left in the world – at a conservation park when they go to Bathurst on the chance that they may spot an albino kangaroo there.



Episode 5 – Croc Island Rangers

It's an invitation-only trip for the well-travelled hosts to the remote Crocodile Islands, a small speck of sand in the Arafura Sea located off the coast of north-east Arnhem Land. But the mission that awaits Kayne is sure to test all the bush skills and knowledge he can possibly muster.

The Crocodile Island Rangers are responsible for over 20 islands in the Crocodile Islands group, managing approximately 40,000 hectares of land, 200 kilometres of coastline and 6,000 square kilometres of sea country north of Australia. The islands are a national treasure of rich cultural customs and superb land and sea country. They are also home to large colonies of turtles. It's a unique place the traditional owners want to conserve for all Australians to enjoy forever.

But the remote top of Northern Australia also presents some of the harshest outdoor working environments and requires tough, dedicated rangers to keep the country healthy.

Their work is as diverse as the landscape – marine debris cleanups, weed and fire management, pest animal control, cultural site management, sea patrols and biodiversity surveys, and clearing ghost nets that trap turtles are just a few of their tasks.

Becoming a Croc Island ranger takes years of training, not to mention the cultural knowledge learned and shared through countless generations, and the physical toughness.

Kayne is introduced to some bush tucker by the Aboriginal rangers, including mangrove worms and longwans, a type of shellfish. The boys also meet Dr Kiki Dethmers, a Turtle Scientist.

Some of the tasks Kayne has to complete in order to become a ranger include clearing beaches of ghost nets (nets that have washed up from the sea with trapped animals in them), helping with wildlife surveys, counting turtle eggs and helping baby turtles reach the sea from their nests, and taking a turtle DNA sample.

Kayne's steep mission is to train to become one of these incredibly resourceful and passionate rangers in only 36 hours – and even then, he has to be accepted by a tribal council of elders from the Crocodile Islands!





Episode 6 – Croc Eggs

Kamil and Kayne go on a top-end crocodile adventure tinged with urgency and jeopardy and featuring some of the most spectacular scenery in the country.

Saltwater crocodiles, or 'salties', have been on Earth in their current form for 200 million years. To put that into perspective, homo sapiens have only been around for 100,000 years. Proving crocs are expert killing machines. Once hunted to the brink of extinction, crocodile numbers were reduced to a mere 4,000. Now a protected species, estimates put the wild population close to 100,000.

Their name is misleading, as the breeding and raising of young saltwater crocodiles actually takes place in freshwater areas. Females lay in the vicinity of 40 to 60 eggs between November to March each year, building nests made from plant matter and mud on riverbanks.

While the location of the Australian crocodile nests is sometimes used as an indication of how much rain can be expected during the upcoming wet season, the crocs don't always get it right.

Many nests are flooded every year, killing the embryos, and in this particular Bushwhacked! mission presenting Kayne with a big challenge: collect infertile eggs for research and relocate croc eggs before the wet washes them away, while keeping a keen eye out for the ever-protective nest guard – mother saltie!

Whilst learning about the safest way to catch and hold baby crocodiles and how to fend off the adults, the boys find out from East Alligator ranger Sean Nadji about the threat of feral pigs eating the crocodile eggs.

They also meet bat expert Andrea Ruske, who rescues orphaned fruit bats and raises them until they're ready to be released back into the wild.

Episode 7 – Inland Taipan

A matchmaking mission – but far from romantic – that takes Kayne and Kamil to Lake Eyre and Coober Pedy. This adventure involves the world's most venomous snake!

The inland taipan is the world's most venomous snake – the venom from one bite could kill over 100 people. But very few people have seen this snake in the wild because it is very, very shy and lives in deep cracks and fissures formed in the desert, rarely travelling above ground.

The inland taipan is a very rare snake and their gene pool in captivity is running dangerously low. Herpetologist Luke Allen has been breeding inland taipans for venom collection but he urgently needs some help in finding and safely containing a new taipan for breeding purposes.

Enter Kayne, who needs to get an inland taipan a date. They have beautiful yellow colouration in the warmer months of the year. It's the only snake in Australia that actually goes through a deciduous colour change.

Along the way they find a bearded dragon and a little Bynoe's gecko in a mine shaft, and Bill and Shontelle Lennon of the Antikarinya Corporation show them an endangered species – the legless lizard.



Episode 8 – Bull Sharks

The Gold Coast is normally associated with sunshine and beach holidays, but a trawl through the canals and rivers of the Gold Coast will prove anything but a holiday for the *Bushwhacked!* cohosts.

Kayne and Kamil are on a mission to come face-to-face with a predatory bull shark, responsible for more attacks on humans than any other shark. Many experts consider bull sharks to be the most dangerous sharks in the world. Historically they are joined by their more famous cousins – great whites and tiger sharks – as the three species most likely to attack humans. Bull sharks get their name from their short, blunt snout, as well as their pugnacious disposition and a tendency to headbutt their prey before attacking.

But that's not the only thing that makes this shark species interesting research fodder. The predators can do something that no other shark can – they can survive in freshwater rivers.

The Ugarapul people still trap and eat bull sharks in this coastal region.

The boys spot a tawny frogmouth; Kamil explains to Kayne that most people mistake these birds for owls but they're actually a nightjar.

The hosts team up with Dr Jonathan Werry in sunny Queensland, who has been catching and tagging these deadly animals, all in the name of keeping both humans and sharks safe.

And what's a tag mission without an additional challenge? Kamil would like to see his co-host experience a brush with danger in more ways than one – Kayne is challenged to brush a bull shark's teeth!



Episode 9 – Platypus

Kayne and Kamil are heading to Tasmania in the name of platypus population research and to uncover a little-known but dangerous characteristic of this popular species.

Despite being found on the mainland, both the platypus and the echidna are relatively abundant in Tasmania. These are the world's last surviving monotremes and are considered an evolutionary link between reptiles and mammals. They are warm-blooded, have fur and suckle their young, like mammals. Oh, and they pee and poo from the same pipe, which Kamil discovers whilst giving a platypus a pregnancy test.

Tasmania was cut off from mainland Australia by rising sea levels 10,000 years ago. With fewer introduced predators, Tasmania remains a refuge for native animals; many species that are found in Tasmania cannot be found anywhere else on Earth.

Wildlife veterinarian James Macgregor shows the boys how platypuses are tracked to check their number by inserting a tiny microchip under the skin.

After setting up a net across the stream to catch a platypus, Kayne and Kamil are keen to find out more about the only other monotreme in the world, the echidna, from zoologist Stewart Nicols.



Episode 10 - Wolf Spider

This creepy-crawly episode is an invitation to join the hosts on a lunch date in Gosford, New South Wales.

Belonging to the genus Lycosa, which means 'wolf' in ancient Greek, wolf spiders are found throughout Australia. Interestingly, female wolf spiders construct an egg sack, which they carry around. When the spiderlings are ready to hatch, they are carried on the female's back until they're able to venture off on their own.

Unlike most spiders, wolf spiders don't use webs to hunt. Instead they are robust and agile hunters with excellent eyesight – incredibly wolf spiders sport eight eyes! The species is known for their strong bodies and some are opportunistic hunters, pouncing upon prey as they find it and biting with their powerful jaws or even chasing it over short distances.

This eight-eyed hunter dines mainly on small insects, including crickets, grasshoppers, earwigs, flies and ants. This sounds so enticing that Kamil has challenged Kayne to a little taste test – time to munch on a wolf spider's lunch.

Spider and reptile expert Billy Collett loves spiders and is there to help Kayne catch one, along the way admiring a redback that they find.

Their encounter with a death adder in the bush while they are hunting the wolf spider luckily does not involve being bitten, as it is the fifth most venomous snake in the world.

To set the scene, Darkinjung educator Gavi Duncan tells the dreamtime story of how the spider got his web.

Episode II – Hairy-Nosed Wombats

Kayne and Kamil are on a journey to Epping Forest National Park in central Queensland to meet the hairy-nosed wombat – once thought extinct, but still critically endangered – for a nose-tickling mission.

The name 'wombat' comes from the Darug language spoken by the Aboriginal people who originally inhabited the Sydney area. There are three species of wombats in Australia: the bare-nosed or common wombat, the southern hairy-nosed wombat and the northern hairy-nosed wombat. At up to 40 kilograms, the northern hairy-nosed wombat is the largest of the three wombat species.

Habitat competition from cattle and sheep grazing saw a decline in the populations of northern hairynosed wombats, and early in the 20th Century the northern hairy-nosed wombat was thought to be extinct.

In 1930 a small population was discovered in central Queensland. No efforts were made to preserve the species and in 1982 there were only 30 northern hairy-nosed wombats left on Earth!

Thankfully the fate of this iconic Aussie changed course after Epping Station was gazetted as a National Park and its population was closely monitored. Slowly but surely the population is currently recovering and now there are 200 individuals in Epping Forest National Park.

As you might imagine, the hairy-nosed wombat has a hairy nose – it's covered in soft, short fur that is usually white or brown. The nose itself is soft and pig-like.

Cue Kayne for an adorable nose rub! But first he has to find one of these extremely endangered native animals.

While in Epping Forest National Park, Kamil spots a black-headed python shedding its skin and the boys help feed baby kookaburras.





Episode 12 – Cone Snails

Kayne and Kamil go on an epic journey to the sea floor to carry out research on 'the silent assassin', the deadly cone snail.

It's chronically slow on the move but deadly fast in action. It's beautifully patterned and brightly coloured and it's a snail! It's been called 'the silent assassin' as it creeps around the sea floor in the dead of night hunting fish with its lightning fast harpoon.

There is no known cone snail antivenom. The venom of a cone snail is a cocktail of toxins so intricate that no one has managed to crack the combination code. Dr Jamie Seymour is a venom expert and cone snails have not escaped his attention.

Using a specially designed full-face covering mask, full-body diving suit and state-of-the-art technology, Jamie is accompanied by an apprehensive Kayne on a nerve-racking deep-sea mission to record the speed of a deadly cone snail's harpoon.

Episode 13 – Dingoes

Fraser Island in Queensland beckons and so too does the need to sustain the predator that calls the World Heritage Site home.

The dingo, Australia's largest land predator, has been an integral part of the Fraser Island ecosystem for more than 4,000 years. As a result of Fraser Island's isolation, the resident dingo population – one of the last pure-breed populations in Australia – has largely been protected from interbreeding or hybridisation with domestic dogs.

The dingo is Australia's only native dog. They communicate with a howl that sounds like a wolf and, like a wolf, they've been known to hunt in packs.

Until recently, dingoes were considered a subspecies of dog, but recent analysis has revealed that the dingo is actually a species distinct from dogs and wolves. Its scientific classification is canis dingo. This makes the population of wild dingoes on Fraser Island even more unique.

But interbreeding with domestic dogs is one of the major threats to dingo populations and the reason why dogs are banned from the island. The other major threat to dingoes is humans. Visitors to the island often feed or interfere with dingoes, which modifies their behaviour, putting both humans and dingoes at risk.

Rangers are helping conserve the dingo population while keeping people safe. One form of management involves tagging, which enables rangers to monitor numbers, quickly identify dingoes and assess their behaviour.

Armed with only a big dose of courage, Kayne is on a mission to give a handshake to and then tag a wild dingo.





BUSHWHACKED! 3 STUDY GUIDE

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