

A STUDY GUIDE BY KATE RAYNOR





http://www.metromagazine.com.au

http://www.theeducationshop.com.au



n this informative and entertaining series, Tim Flannery and John Doyle embark on a 4000-kilometre odyssey across the top of the continent. They discover massive modern mines and vast irrigation systems, mango farms and cattle ranches, rugged savannah and ancient fossil fields. It's a pristine natural world bursting with life but facing threats from the seemingly irresistible urge towards greater and greater development. Essentially Two in the Top End is about the past, the present and the future, and while the tone is often light-hearted, its central quest is to address the big global issues of development and sustainability.

Doyle and Flannery make engaging tour guides, and part of the series' charm is in witnessing the genuine warmth and affection that exists between the two men, Doyle with his dry, laconic humour, and Flannery with all his passion and intellect. They make a great combination. And in their very different ways, both men convey tremendous respect and a sense of awe at the magnificence of this ancient, weathered continent. During their journey, they experience the big wet, the big dry and a touch of 'mango madness' - and it's a pleasure to go along for the ride.

Curriculum Links

Two in the Top End could be well used at a senior primary level, and in junior and middle secondary Studies of Society and Environment (SOSE/ HSIE, Humanities: Geography, Geology) and Environmental Studies. It could also be utilised as an adjunct to particular theme- or issue-based units (for example, climate change, sustainability, renewable energy sources, water management, biodiversity). The series is comprised of six 26-minute episodes, any one of which could be used as a stand-alone text. Teachers are advised to pick and choose those parts of the guide that suit the needs and curriculum areas of their classes, and to adapt and modify activities wherever necessary.



Episode One: Outline

Tim and John begin their epic journey on Lizard Island, examining the health of the Great Barrier Reef. There's a research station here run by the Australian Museum. Scientists are examining the affects of pollution and global warming on tropical fish. Rising water temperatures lead to coral bleaching and a whole host of related problems - and the temperature increases only need to be very slight to have an impact. The news is alarming; one young researcher says glumly that she doesn't even want to consider the possible state of the Reef in fifty years time.

At Cooktown, our intrepid travellers learn of plans for a huge marina complex. This introduces one of the series' most persistent themes: the relentless pressure to develop, to draw economic profit from the land. They continue along the Savannah Way to Black Mountain, where imposing granite boulders tell a tale of 260 million years of earth history. Tim explains that two species of frogs and two species of lizards are found here and nowhere else: this is a man who can turn road kill into an educational opportunity! These moments highlight the great value of this series: we desperately

need education in order to know just how precious this land is and how much we risk losing if we continue to put economic incentives above the needs of the environment.

At Ravenshoe, they visit a wind farm and Tim notes that the twenty wind turbines they see generate enough electricity to power 3,500 houses. They take a moment to celebrate Australia's ratification of the Kyoto Protocol. Then it's on to the Undara National Park, where they discover 'nature's own Sistine Chapel', lava tubes crawling with bats and snakes and providing evidence of a dramatic period in the earth's history. All along the way, Tim's paleontological background allows him to provide informative context for the duo's many discoveries.

Episode One: Activities

 As this episode focuses on far north Queensland, students may wish to refer to the maps on this page in order to get their geographical bearings. Teachers should draw on student experiences of travelling in this region where possible, and tap into any other sources of prior knowledge.





SCREEN EDUCATION



- Find the following places on the map of far north Queensland:
 - Cooktown;
 - Black Mountain;
 - Undara National Park; and
 - Ravenshoe.
- Add Lizard Island to the map. (Students may wish to draw their own map or download an alternate one.)
- What area does the region known as the Atherton Tablelands cover?

Far North Queensland

 In what ways could we consider the Top End 'Australia's last frontier'? John says the call for more development is a constant refrain across the Top End, and he likens the region to an irresistible honey pot. Is development here inevitable?



- What is odd about the monument to Captain Cook in Cooktown? Design your own monument and annotate your design choices.
- What do you predict might happen in Cooktown over the next decade? What are the mayor's plans? What are the features of 'low impact tourism'? What measures do we use to assess the impact of tourism?
- Monica, the scientist researching the effects of global warming on the Great Barrier Reef, says that 'You can't *not* care' about the Reef and its future. Write a worse-case scenario for what may happen to the reef over the next couple of decades. Now write a plan for the steps

that need to be taken if disaster is to be averted. Why should we care about the fate of the Reef?

- What is the Kyoto Protocol? Why is it significant? What were the Howard Government's reasons for not ratifying it?
- Choose a source of renewable energy and explore how it could contribute to the reduction of greenhouse gases. What sorts of objections, if any, are sometimes raised to this energy source? What are its advantages over coal? How suitable is the environment depicted in this episode for developing this energy source? How suitable is your home town?
- Tim is a passionate advocate for action on climate change. Imagine he was Prime Minister for a day. What steps might he take in tackling this huge problem? Imagine you are Tim Flannery. Write a letter to parliament outlining what you feel must be done and the reasons why inaction is not an option.
- Do you believe the Rudd government is doing enough to reduce greenhouse gases? Design a poster promoting awareness of the personal steps we can all take to reduce our carbon emissions.

Episode Two: Outline

In the second episode, Tim and John are trying to keep one step ahead of







the wet season and stay on the right side of some terrifyingly large crocodiles. They travel across the base of the Cape, encountering stories of gold and lost explorers. They investigate the abundant fisheries of Karumba, where prawns and barramundi generate one hundred and thirty million dollars annually. Next they visit the Zinifex Century Mine, which digs up five million tonnes of ore each year, making it Australia's biggest zinc mine. The sheer scale of the operation is staggering. John notes, 'The earth is literally being torn asunder to feed the world's insatiable appetite for raw materials'. Ten kilometres away from the Mine is Lawn Hill National Park. The contrast illustrates the ongoing tension between development and preservation, and the episode continues to refine the focus on what the pair sees as the essential dilemma of the Top End: here is a vast, ancient land, with, as John puts it, 'the modern world knocking on its door, very loudly'.

Episode Two: Activities

• Using the above maps, locate:

- Croydon;
- Normanton;
- the Gulf of Carpentaria;
- Karumba; and
- Lawn Hill National Park.
- When is the wet season? How wet is it? Find statistical information on tropical rainfall. How does this compare with annual rainfall figures for your hometown? What effect does the wet season have on people living in this region? How must they organise their lives to cope with the challenges of the Big Wet?
- Croydon, one hundred and fifty kilometres from Normanton, was once the third largest town in Queensland. When was this and what happened? What is its population now? Is the cycle of boom and bust inescapable in the mining industry?
- Write an obituary for a ghost town.
- Explore the history of one of the mines in this region.
- What happens when the mining is over? What can you find out about the efforts companies make to clean up the site before they finally depart?





- How is the mining industry being affected by the current global economic meltdown? Explore one sector or company, compiling a list of relevant facts and details.
- How will the mining sector be affected by an Emissions Trading Scheme? Choose one company and examine its position on global warming.
- What are the water requirements of a large mine like Zinifex?
- At Karumba, Gary Ward, a barramundi fisherman for thirty years, says the fish stocks are carefully monitored. How do you think this is done? What evidence is there that the fisheries in this region are being sustainably managed? What is the problem with the off-shore Indonesian fishermen and their methods?
- What bird species breed in the Gulf during the wet season?
- What is so special about the nailtailed wallaby?
- Write an account of Burke and Wills' experiences along the Savannah Way in 1861.
- How big is Krys the Savannah King?
 Write a first person imaginary account of his capture.
- What was the Gulflander originally used for? What does it do now?
- Imagine you are at the fossil fields in



Riversleigh. Write up an account of an amazing discovery.

• Write a fossil finding fact sheet.

Episode Three: Outline

In this episode, our palaeontologist and his wise-cracking friend cross from Queensland into the Northern Territory. They are making their way along an increasingly muddy red dirt track towards Darwin, the big smoke of the north with a population of 100,000 and growing fast. This is a place John says is bone dry half the year and sodden the other half.

Along the way, Tim finds evidence of the beginnings of life – ancient stromatolites dating back 1.5 billion years. They visit the Lost City and its unique rock towers. The idea that Australia is a young country is everywhere put to the test, as Tim and John discover prehistoric stories in the landscape. Tim's tremendous enthusiasm for the natural world and its history conveys the urgent message that we need to be protecting this magical place NOW.

A stop at Borroloola provides a chance to listen to what the Indigenous communities think of the huge development taking place in the Top End. The Macarthur River Mine ships out 1.8 million tonnes of zinc, lead



and silver annually. Elder Jackie Green notes that employment opportunities come at some cost to the natural environment. He is concerned floods will flush toxic pollutants into the river from the open cut mine site.

Heading west, John and Tim examine the cattle industry. At Matarinka, they witness a new way of managing herds in this difficult country. Finally John and Tim arrive in Darwin, where temperatures soar, rain clouds taunt, and the pair go just a little 'troppo'. John continues to explore his uneasy fascination with the big crocs, which never seem too far away: two hundred and fifty crocodiles have been found in Darwin Harbour, and in the last thirty years, they have killed twenty people and injured forty-five. One solution appears to be farming: there are now eighteen farms across the Top End, farming some 50,000 crocodiles. If this is to be our new food bowl, then perhaps our diet will have to change?!

Episode Three Activities

- What is the stereotype of the Northern Territorian? Draw and label one of these outback mavericks.
- Is Darwin the 'Northern Nirvana' as John suggests?

- Conduct a debate about speed limits in the Territory.
- Design a travel brochure for Darwin.
- As the temperature and humidity build, Tim and John find their tempers fraying. What leads to 'mango madness' and how does it manifest itself?
 - How does the gum tree protect itself from possums?

• What is special about Moira O'Brien's farming methods at Matarinka? What is 'intensive rotational grazing' and how is it an improvement over traditional methods of cattle management? Why is Tim particularly impressed that Moira shows concern for the quality of the soil on her property?

- What were the reasons for the federal intervention in the Northern Territory?
- Why does John comment, 'This isn't an easy place to live'?
 - Meteorologist Sam Cleeland explains that the region is getting wetter, with 250-300mm more rain per year than the average fifty years ago. How does he account for this dramatic transformation in weather patterns?



Episode Four: Outline

On Darwin's foreshore, Tim finds a tamarind tree, evidence of an earlier people who were drawn to the north. At the Darwin Museum, they find more information about all sorts of visitors to the Top End. One visitor – or rather invader – is widely despised: the cane toad. Tim and John join a vigilante mob, acting under cover of darkness to put a stop to this deadly pest. They learn, incidentally, that the toad makes excellent fertiliser.

Continuing on their way, they explore the Mary River and a place called Humpty Doo where it was once hoped huge crops of rice (one hundred thousand hectares!) could be grown. Next stop is Lake Argyle, part of the Ord River Scheme, a dam that holds ten times more water than Sydney Harbour. The water is used to irrigate a mere 14,000 hectares of land – and the main crop? Sandalwood! Maybe this area won't be Australia's new food bowl after all ...

The pair arrive in Kununurra, a boom town generating wealth from mining, agriculture and tourism. As this fourth episode comes to a close, Tim and John cross the border into Western Australia and approach the Gibb River Road, one of the great 4WD journeys in Australia. But there's just one problem: the road is closed.

Episode Four Activities

- Why is the tamarind tree of such interest to Tim?
- Why have property values increased thirty per cent in Kununurra in the last year?
- Draw a map showing the spread of cane toads. Why are they such a terrible pest? What impact do they have on the environment? Invent a way of controlling the plague of toads. Label and annotate your design/method.
- How does Toad Watch operate?
- Why is the smaller toad more dangerous to a frill-necked lizard than its larger counterpart?
- What is the purpose of the Toad Vat?

- What is the purpose of the checkpoint at the border between the Northern Territory and Western Australia?
- Why is Tim concerned about the government's approach to the threat of cane toads in Western Australia?
- The average age in Darwin is thirtytwo. Can you find out what the average age is in your capital city? What attracts young people to the north?
- Why does Tim say, 'We're still trying to find out how to live properly in northern Australia'?
- Farmers using water from the Ord River Scheme have attempted to grow wheat, rice and cotton. All of these crops have failed. Choose one crop type and research its history in this region. Currently the water is being used to irrigate sandalwood tree plantations. What is John's concern about this? What are some of the obvious positive effects of this style of farming?

Episode Five: Outline

The two continue their journey, navigating roads still perilous from the recent deluge. They are heading towards the Kimberley, an ancient, barely touched landscape. But perhaps it won't remain untouched for much longer: the despised cane toad is predicted to arrive in the Kimberley in the next year or two, decimating wild life as it continues its relentless march south.

This is a land of tremendous extremes. Viewers from drought-stricken southern states can only marvel at the tremendous flows of water in the Kimberley. During the wet season, the mighty Fitzroy River has the largest flow of any Australian river. It's also a land of rare birds, and Tim and John visit Mornington Station, where the Gouldian finch is thriving. The Australian Wildlife Conservancy owns nineteen former cattle stations in the region, which have now been turned into wildlife reserves. Here our guides also learn about the annual bushfires that blaze across the landscape. About half the Kimberley goes up in smoke every year - that's an area the size of Switzerland!

Continuing westward, Tim and John cross the Pentecost River, and at Emma Gorge Tim's eagle eyes spot ancient ripple rock in a creek bed.





Episode Five: Activities

- Tim, 'the Indiana Jones of rocks', believes all secondary students should study geology and earth history. Do you agree? What value would this have? Make an argument for the position that all informed environmentalists should have a thorough grounding in the history of the earth.
- What innovative fire methods does Sarah Legge of Mornington Station use to reduce the extent and intensity of the seasonal bushfires that devastate the Kimberley?
- What technology does Jo Heathcote, the field ecologist, use to lure the Gouldian finch?
- Why is the Gouldian finch endangered?
- What is the key to maintaining biodiversity in the North?
- Produce a map of the Kimberley delineating Indigenous areas, pastoral lands and conservation land.
- Atticus Fleming, head of the Australian Wildlife Conservancy, says it's false to set up a dichotomy between preserving a species and feeding the world. For him, the goal is how best to manage the land for both wildlife and pastoralists. Imagine you are Atticus. Write an outline of a

plan for the region which addresses the needs of both parties and also takes into account climate change.

 Diamond Gorge was the site of a proposed dam. Would this have been a good thing? How do the Indigenous communities feel about it? Why didn't it go ahead? What effect do dams have on a river's eco-system and the habitats along its banks?

Episode Six: Outline

This is the last leg of the pair's unique journey investigating Australia's northern frontier. They travel up through red dirt country to the tip of the Dampier Peninsula. Indigenous rangers take them on a tour of the islands around King Sound where the tides swirl and surge like a giant washing machine. The waters are teeming with life and the rangers are on patrol for illegal fishing activity, particularly the Indonesian fishermen who pilfer trochus shells.

Pearling boomed here in the late nineteenth century and is still a vibrant industry. The farms rely on a pristine natural environment but even in this remote place there are threats. Nearby is the site of one of Australia's largest proposed natural gas projects: it's the same dilemma they've come across throughout their journey, development versus conservation. Every step of the journey, they have found a land



of massive wealth but also massive dilemmas. They visit places where dinosaurs once trod, but find that human activity is leaving even greater imprints.

The dynamic duo forge on towards Derby and marvel at the massive twelve-metre tides. Along the way, where John sees endless savannah and the occasional outcrop of rock, Tim sees a window to the prehistory of the continent in the form of an ancient Devonian reef. Human history is here too, with Aboriginal cave paintings recording white occupation. They visit Tunnel Creek, where the legendary Aboriginal warrior, Jandamarra, hid from police but was eventually shot and killed.

Arriving in Broome after two months on the road and having travelled some 4500 kilometres, John and Tim's epic trip draws to a close. It's Cable Beach at peak hour, a fitting end to a journey that has examined the impact of insensitive development on our natural



environment. Four wheel drives dominate the beach, and an Indigenous elder sits disconsolately near a sacred site, pointing out the tyre marks. It feels like we're reaching a tipping point, and the stakes are high. How much of the raw beauty and power of the Top End are we prepared to risk?

Episode Six: Activities

- Write a proposal to the federal government for funding to invest in tidal power at Derby.
- What kind of market is there for trochus shells?
- Draw and label a picture illustrating the rich marine life found on the Dampier Peninsula. A prize could be given to the student who includes the greatest detail.
- Bruce Brown, son of a pearler, discovered a Japanese headstone on his property dating from 1904.
 Dotted around, half buried in the sand, are the tombstones of another forty divers. As Tim puts it, this is 'the true price of grandma's pearls'.
 Research and write an account of the early days of the pearling industry in the Top End. What are the risks and dangers involved in diving for pearls? Write a dramatic short story of a dive using first person narration.

- Write an account entitled 'A Day in the Life of a Pearl Farmer'.
- How might climate change impact on the pearling industry?
- In what ways does the pearling industry actually serve to protect the environment?
- Natural gas is half as polluting as coal for electricity generation, so why is Tim against the gas project going ahead in this region? What damage might it do?
- Broome, a town with 15,000 residents, is inundated with 250,000 tourists a year. How might the environmental impact of tourism be reduced? Design a pamphlet to be given to tourists to make them aware of their responsibilities.
- The men joke that Broome is most definitely a car town, with signs advising pedestrians to give way to cars. Imagine you are on the local council. What measures could you take to shift this dependence on cars?
- Cable Beach at Peak Hour: explore the inescapable paradox of tourism, that everyone wants to visit this beautiful spot, and in doing so, they threaten its beauty.



Reflecting on the Series Overall ...

- What different qualities do the two presenters bring to the series? How would you describe their relationship? In what ways does John function as a surrogate audience member for Tim's mini-lectures?
- Write a 100-word proposal for John and Tim's next adventure.
- Write a diary entry from either John or Tim's perspective on travelling with their companion, the highs and lows.
- Compile a list of the peculiar challenges and difficulties confronting travellers in this region. Make up an inventory of required items for a trip like this one.
- What are the predicted effects of climate change on this region?
- Will the deep north become the new food bowl of the nation? What challenges confront farmers in this region?

In Episode 2, John says: At times humans just don't seem to belong in this forbidding country ... [There's] too much water one minute and not enough the next: nature's balance is not always easy to live with.

What strategies have Indigenous Australians utilised to live in this region?

- Choose one Top End region and investigate its traditional owners.
 Present your history as a Power-Point presentation to the class.
- Compile a 'compare and contrast' list, with two columns examining the similarities and differences of your home town and one of the places explored by Tim and John in this series.
- Design a promotional campaign for one of the areas Tim and John visit.
 Focus on eco-tourism. Include a tourist brochure.
- If John and Tim come back to the Top End in ten years time, what do you think might have changed?



- What are the particular features of a tropical climate/landscape? Where does the tropical north begin?
- Locate the Tropic of Capricorn on the map above; this is generally taken as the dividing line between northern and southern Australia.
 The pair travel from Cooktown to Broome. Chart their journey on a map, highlighting key points.

Conduct a class brainstorm to identify the key environmental issues facing us today (consider, for example, climate change, peak oil, species & habitat loss, food security, overpopulation, water shortages). Divide the class into small groups and allocate each group one of the topics from the list. Students research the issue and present their findings to the class. Each group may choose to designate particular roles to individuals. Presentation may take the form of a poster. The rubric on page 12 could be used in assessment, and may be adapted to meet curriculum requirements and year level. The presentation must also include an oral component. Students should be reminded to detail the sources of all information used.

Resources Office of Northern Australia:

http://www.infrastructure.gov.au/ regional/ona/index.aspx

Information on the Kyoto Protocol:

http://unfccc.int/kyoto_protocol/ items/2830.php

http://www.cana.net.au/kyoto/

http://www.kyotoprotocol.com

Wind Farms:

Integrating Wind Energy into the Australian National Electricity Market: http://www.ceem.unsw.edu.au/ content/userDocs/200608WREC9_ WindIntegrationNEM_PPT.pdf

Wind Power Gathers Speed: http://www.science.org.au/ nova/037/037print.htm

Wind Energy

http://www.kidcyber.com.au/topics/ windenerg.htm

Energy Australia: Wind: http://www.energy.com.au/energy/ ea.nsf/Content/Kids+Wind

Energy Matters: http://www.energymatters.com.au/ renewable-energy/wind-energy/

CSIRO Wind Energy: http://www.csiro.au/science/Wind Energy.html

Ord River Irrigation Scheme:

The Seven Engineering Wonders: The Ord River Irrigation Scheme: http://www.abc.net.au/nt/stories/ s1349572.htm

http://www.kdc.wa.gov.au/kimberley/ tk_ord.asp

http://www.ordirrigation.com.au

Coral Bleaching:

Will Climate Change Kill the Reefs?: http://www.science.org.au/ nova/076/076key.htm

http://www.gbrmpa.gov.au/corp_site/ key_issues/climate_change/climate_ change_and_the_great_barrier_reef/ what_is_coral_bleaching

http://www.reefed.edu.au/home/ explorer/hot_topics/coral_bleaching

The Great Barrier Reef:

http://www.wwf.org.au/ourwork/ oceans/gbr/

Great Barrier Reef Marine Park Authority: http://www.gbrmpa.gov.au

Australia's Culture Portal: http://www.cultureandrecreation.gov. au/articles/greatbarrierreef/

Australia's Great Natural Wonder: http://www.greatbarrierreef.org

Australian Wildlife Conservancy:

http://www.environment.gov.au/parks/ nrs/getting-involved/organisations/ wildlife-conservancy.html

Devonian Reef National Parks:

http://www.australianexplorer.com/

devonian_reef_national_parks.htm

http://www.bonzle.com/c/a?a=p&p= 58477&cmd=sp&st=WA&place= Devonian%20Reef%20Conservation %20Park&file=Devonian_Reef_ Conservation_Park.htm

http://www.blueytravel.com/ Devonian%20NP.asp

Indigenous Cave Paintings:

http://www.kimberleycoastalcamp. com.au/rockart_gallery.asp

http://www.ozoutback.com.au/ postcards/postcards_forms/ rockpaintings_wantqld/index.htm

http://www.skwirk.com.au/p-c_s-14 _u-309_t-762_c-2865/aboriginalheritage-rock-art/nsw/history/ investigating-history/heritage

Australian Heroes: Jandamarra:

http://www.iearn.org.au/fp/art/ heroes/jand.htm

http://www.abc.net.au/tv/rewind/txt/ s1204849.htm

Nail-tailed Wallaby:

Foundation for National Parks & Wildlife: http://www.fnpw.com.au/OurProjects /Plants_Wildlife/Bridled_Nail_Tail_ Wallaby.htm

Australian Wildlife: Marsupials of Australia: http://www.australianwildlife.com.au/ marlist.htm

Gouldian Finch:

http://www.kidcyber.com.au/topics/ Gouldianfinch.htm

http://www.austmus.gov.au/ factsheets/gouldian_finch.htm

Cane Toads:

http://www.austmus.gov.au/ factsheets/canetoad.htm



Environmental Issues Poster Activity Rubric



| CATEGORY | 4 - ABOVE STANDARDS | 3 - MEETS STANDARDS | 2 - APPROACHING STANDARDS | 1 - BELOW STANDARDS | SCORE |
|---|--|--|---|---|-------|
| Presentation/ Design | The poster is excep- tionally well-designed in terms of layout and neatness. | The poster is well- designed in terms of layout and neatness. | The poster is a bit messy and unclear in its design and layout. | The poster is distractingly messy and/or very poorly designed. | |
| Content/ Accuracy | As required, at least seven facts are displayed on the poster, and sources clearly cited. | Five to six accurate facts are displayed on the poster, and mostly cited. | Three to four accurate facts are displayed on the poster, but not clearly cited. | Less than three accurate facts are displayed on the poster, with little or no attempt at citation. | |
| Use of class time and working as a group | Used time well during each class period. Focused on getting the project done. Never distracted others. Facilitated the effective working of the team. | Used time well during each class period. Usually focused on getting the project done and never distracted others. Mostly promoted effective working of team. | Used some of the time well during each class period. There was some focus on getting the project done but occasion- ally distracted others. Did not always contribute to effective working of team. | Did not use class time to focus on the project OR often distracted others OR failed to work well with the group. | |
| Spelling/ Mechanics | Spelling and punc- tuation are correct throughout the poster. | There is one error in spelling or punctuation. | There are two errors in spelling or punctuation. | There are more than two errors in spelling or punctuation. | |
| Required Elements | The poster includes all required elements as well as additional information. | All required elements are included on the poster. | One required element is missing. | Several required elements are missing. | |

SCREEN EDUCATION



http://www.austmus.gov.au/ herpetology/faq/cane_toad.htm

http://www.jcu.edu.au/school/phtm/ PHTM/staff/rsbufo.htm

http://www.stopthetoad.org.au

http://www.canetoads.com.au

Bustards:

http://www.savanna.org.au/all/ bustards_emus2.html

http://www.nt.gov.au/nreta/kids/ project/pdf/Bustards.pdf

Crocodiles:

http://animal.discovery.com/ convergence/safari/crocs/expert/ expert2.html

http://www.kidcyber.com.au/topics/ crocs_oz.htm

http://www.australianfauna.com/ saltwatercrocodile.php

http://www.crocodileadventures.com

Darwin Crocodile Farm

http://www.crocfarm.com.au

Paul Toohey, 'Top End Crocodile Terrorises Park Rangers in Dinghy', *The Australian*, <http://www.news.com. au/story/0,23599,24919897-421,00. html?from=public_rss>, 16 January 2009.

Trochus Shells:

http://www.fish.wa.gov.au/docs/aqwa/ Trochus/index.php?0308

Pearls:

http://www.fish.wa.gov.au/wf/articles/ PearlCreation.php?0301

http://www.costellos.com.au/pearls/ cultivation.html

http://www.australian-aquacultureportal. com/industrygroups/pearls.html

Sandalwood:

http://www.greeningaustralia.org.au/ index.php?nodeld=99 http://www.wasandalwood.com

Managed Intensive Rotational Grazing:

http://www.crocodileadventures.com

http://attra.ncat.org/attra-pub/rotategr. html

Tamarind Trees:

http://permaculture.org.au/2009/ 02/20/tamarind-tree/

Boab Trees:

http://www.outback-australia-travel -secrets.com/boab_tree.html

http://www.outback-australia-travel -secrets.com/boab.html

Black Mountain:

http://www.epa.qld.gov.au/projects/ park/index.cgi?parkid=136

Undara Volcanic National Park:

http://www.epa.qld.gov.au/projects/ park/index.cgi?noback=1&parkid=133

Lawn Hill National Park:

http://www.epa.qld.gov.au/projects/ park/index.cgi?parkid=185

Karumba:

http://www.gulf-savannah.com.au/ visiting/carpentaria-shire/45-karumba. html

The Lost City:

http://www.about-australia.com/ travel-guides/northern-territory/ darwin/attractions/natural/ the-lost-city-litchfield-national-park/

Fitzroy River and Coastal Catchments:

http://www.frcc.org.au

http://www.australiasnorthwest.com/ en/Pages/Attraction.px?&pid=900169 4&pn=Fitzroy%20River&qid=988aa 68c-8cfc-48fc-bd9f-8998b6d56c0f

http://www.acfonline.org.au/articles/ news.asp?news_id=1502&c=92014

Diamond Gorge:

http://www.kirkhopeaviation.com. au/gallery%20pics/album/kimberley/ slides/diamond%20gorge.html

http://www.bushwalkingholidays.com. au/pdf/gibb-g.pdf

Emma Gorge, El Questro Wilderness Park:

http://www.elquestro.com.au/?gclid= C MLhwKi8IJkCFSMSagod6Vdnag

http://www.elquestro.com.au/maps/

Dampier Peninsula:

http://www.australiasnorthwest.com/ en/Destinations/The_Kimberley/ Pages/Dampier_Peninsula.aspx

http://www.broomevisitorcentre.com. au/pages/dampier-peninsula/

Pentecost River:

http://www.exploroz.com/Places/ 13979/WA/Pentecost_River,_Gibb_ River_Rd.aspx

Gibb River Road Pictures:

http://www.exploroz.com/Places/ 13979/WA/Pentecost_River,_Gibb_ River_Rd.aspx

Riversleigh Fossil Fields:

http://amonline.net.au/fossil_sites/ riversleigh.htm

http://www.queenslandholidays.com. au/things-to-see-and-do/riversleigh -fossil-fields/index.cfm

http://www.about-australia.com/ travel-guides/queensland/outback -queensland/attractions/natural/ riversleigh-fossil-fields/

http://www.outbackatisa.com.au/ AttractionsatOutbackatIsa/ RiversleighFossilsCentre.aspx

Stromatolites:

http://www.pilbara.mq.edu.au/wiki/ Stromatolites

http://www.science.uts.edu.au/ news/2004/stromatolites.html

The Gulflander:

http://www.gulflander.com.au

Burke and Wills:

http://www.burkeandwills.net.au

http://www.burkeandwills.org

http://www.kidcyber.com.au/topics/ bwinfo.htm

Zinifex Century Mine:

http://karumba.qld.au/assets/ document/1216696297-2007_century_ mine_interactive_ebrochure.pdf

MacArthur River Mine:

http://www.mcarthurriver.com.au

Tim Flannery, *The Weather Maker: The History and Future Impact Of Climate Change*, Text Publishing, Melbourne, 2005.

CREDITS

Two in the Top End

2008

4 X 26-minute episodes

Camera:

Gary Russell & Geoff Blee

Audio:

Sam Beattie

Unit Assistant

Pat Elkington

Editor:

Rob Buttery

Assistant Edit

Tamara Seeck

Audio Mix:

Neil McIntosh, Tracks Post Production

Graphics:

Simon Connell, Tactics

Production Coordina

Lucy Murray

Supervising Producer

Toni Malone

Series Producer:

Scott Feeney

Producer

Jessica Brown

Series Director

Michael Cordell

Executive Producers

Michael Cordell & Nick Murray

Alan Erson

14





This study guide was produced by ATOM. (©ATOM) editor@atom.org.au

For more information on **SCREEN EDUCATION** magazine, or to download other free study guides, visit <**http://www.metromagazine.com.au**>.

For hundreds of articles on Film as Text, Screen Literacy, Multiliteracy and Media Studies,

visit <http://www.theeducationshop.com.au>.



