



Investigate and Innovate with CSIRO

Indigenous Research Methodology (IRM) - Biodiversity

Year level: Years 5-6, 7-8

Duration: Teacher specified

Core concepts: Indigenous knowledge of ecosystems and biodiversity

Teacher guide



Acknowledgement of Country

CSIRO acknowledges the Traditional Owners of the lands, seas and waters of the area that we live and work on across Australia. We acknowledge all Aboriginal and Torres Strait Islander peoples and their continuing connection to their culture and pay our respects to Elders past and present. CSIRO is committed to reconciliation and recognises that Aboriginal and Torres Strait Islander peoples have made contributions to all aspects of Australian life including culture, economy and science.



**'Eternal Wisdom,
Infinite Innovation'**
artwork by Rachael Sarra, working with
Gilimbaa.

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Overview

Safety considerations:

- It is recommended to hold a class discussion regarding the possible risks and mitigation strategies prior to starting the activity.
- Slippery surfaces and weather exposure.
- Wear weather appropriate clothing and sun protection.

Pre-learning:

We recommend completing [CSIRO's Cultural Considerations](#) E-Learning modules prior to commencing exploration of this topic.

Key learning goals:

Slide 4 in IRM Biodiversity Classroom PowerPoint Presentation.

CSIRO research:

- CSIRO website - [Indigenous Research Methodology for drought resilience](#)
- CSIRO website - [Sharing knowledge of drought resilience on Country](#)
- CSIRO - [Cultural indicators for drought resilience](#)

Associated documents: [Investigate and Innovate with CSIRO webpage](#)

- Biodiversity - Student Workbook
- Biodiversity - Classroom PowerPoint Presentation (PPT)
- Australian Curriculum and Syllabus links and rubrics






Icons:

Throughout the investigation you will see these icons (below) to highlight the type of activity and guidance recommended.



Indigenous Research Methodology (IRM)

The Indigenous Research Methodology (IRM) (Moggridge, Thompson, & Radoll, 2022) is a framework for learning science through Aboriginal and Torres Strait Islander Peoples' deep knowledge of Country. It connects Indigenous and western scientific approaches through shared practices like observing, predicting and testing. Used in the classroom, IRM helps students engage with scientific inquiry while meeting Science curriculum outcomes and the Aboriginal and Torres Strait Islander Histories and Cultures priority.

IRM Stage	Image	Explanation
1. Connecting with Country		Elements of Country, including the Great Emu in the Sky constellation, rainfall and a flowing river, represent the first stage. Indigenous Peoples have been observing Country since time immemorial. They comprehensively understand all elements of Country including Land, Water and Sky Country. For example, if a river flow changes, Indigenous Peoples can foresee the flow on effects to other parts of Country.
2. On-Country learning		The symbol of places on Country connected by waterways represents the second stage. Indigenous Peoples learn about Country by walking, seeing, smelling, hearing and feeling Country. Country is constantly changing and therefore Indigenous Knowledge is always flowing and evolving. For example, senior Indigenous Peoples may walk Country to monitor wind behaviour, temperature and soil moisture levels before conducting a cultural burn.
3. Recording knowledge		Sandstone engravings of culturally significant animals symbolise the third stage. Indigenous Peoples have recorded and preserved data and knowledge for thousands of years. They store knowledge in Dreaming stories, rock art, technology, ceremonies, songs, dances and Songlines. Kinship systems including human and non-human relations, age and gender, guide how knowledge is held, communicated and passed on.
4. Toolmaking and resources		Cultural objects, including a boomerang, grinding stone, fishhook and spearhead, represent the fourth stage. Preserving, sharing and passing on knowledge of Country has allowed Indigenous Peoples to continually create new tools and resources to manage their Country, live sustainably and adapt to environmental change. For example, fish traps are another helpful tool that Indigenous people continue to preserve and modify to source food more efficiently and sustainably.
5. Reflection and evaluation		The symbol of people gathering and fishing along a river represents the fifth stage. When new tools or practises are implemented to respond to Country, Indigenous Peoples to have always monitored, evaluated and managed their impacts on Country and their communities. For example, the return of cultural species after a cultural burn or flood may indicate healthy Country.

Background information: Indigenous Research Methodology (IRM)

“Our Culture is old. It’s ancient. It is the essence of this country, connects us all to living things such as place, flora and fauna, our waterways and skies, our ceremonies and lores, it’s part of who we are as Murri people. Our rivers flowing and filtering on through to our lakes are the bloodline and life forms that run through our country, this creates the holistic importance of connection of all living things for survival.”

- Rhonda Ashby, Narran Lake Nature Reserve Aboriginal Joint-Management Committee member (Yuwaalaraay and Gamilaraay, 2017) cited in (Coleman, McKemey, & Coleman, 2017)

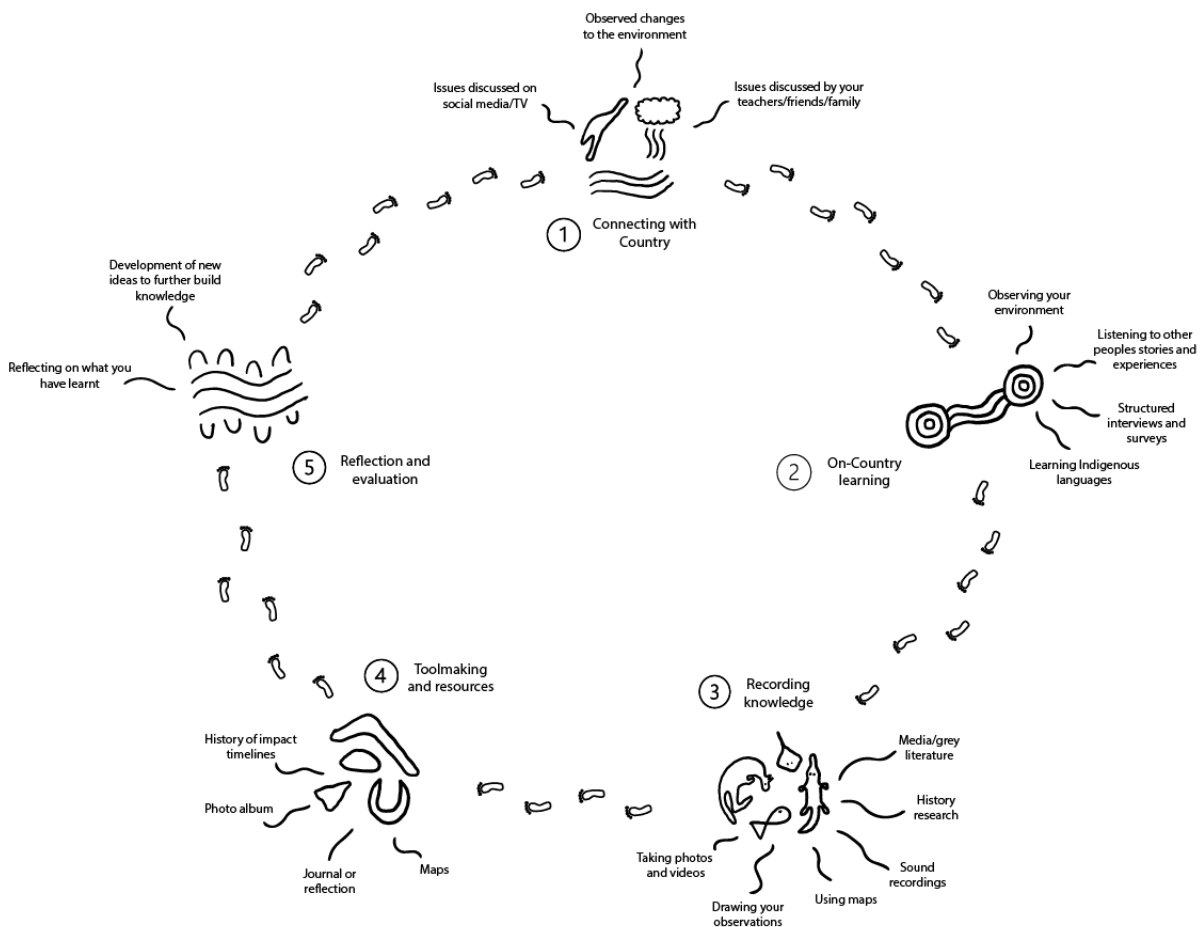


Figure 1 Indigenous Research Methodology diagram

CSIRO researchers and Indigenous Scholars are looking at how to decrease the effects of drought in Australia as they become more frequent and more severe. A key part of this research project is

recognising Aboriginal and Torres Strait Islander (Indigenous) People's deep understanding of Country to collaboratively collect and share Indigenous knowledges in a way that both respects Indigenous Cultural Intellectual Property and is recognised by the western scientific community. CSIRO researchers and a Kamilaroi Scholar have worked closely with the Narran Lakes Joint Management Committee to apply an Indigenous Research Methodology (IRM) that captures their understanding of drought resilience.



Figure 2 Coolamon scar tree along the Narran River, May 2025. The tree trunk shows how high the water level has risen in the past.

The IRM is based on (Moggridge, Thompson, & Radoll, 2022). In this activity, it will scaffold an investigation exploring how water moves on Country, embedded in Indigenous ways of knowing, being and doing. Students will consider their perspectives and positionality with reference to science, and conduct an investigation based around Indigenous Australian's deep connection to and understanding of Country.

“Country encompasses land, waterways, seas and skies, as well as the energy and space in between. It also encompasses relationships. Relationships with plants, relationships with animals and relationships with Ancestors (to name a few).” (PoI, 2023)

Aboriginal and Torres Strait Islander People's cultures are diverse, with more than 250 language groups, however, one commonality is connection to Country, seeing people as part of Country and enduring cultural practices of observing and understanding Country.

“Indigenous Peoples have been observing Country since time immemorial. They comprehensively understand all elements of Country, including Land, Water and Sky Country.” (Fabila, et al., 2025)

Take a moment to consider your own connection to and perspective of Country, and how your culture has influenced how you see the world around you.

“We don't own the land, we all belong to the land, it is part of us as much of us being part of it. In a family setting, it's like mother with her child, she will nurture its growth by being responsible for providing the care and this will continue on generation after generation. It's a cycle of respect, look after one another, look after our trees and waterways, our animals, we all have a place in this, we all have a responsibility with our mother, as she will always look after us and in return, we look after our mother. Take what you need, not what you want, as greed is a form of selfishness, you take, you give back, it's that simple!”

- Rhonda Ashby, Narran Lake Nature Reserve Aboriginal Joint-Management Committee member (Yuwaalaraay and Gamilaraay, 2017) cited in (Coleman, McKemey, & Coleman, 2017)

Word bank and pronunciation guide

Language and pronunciation notice

Aboriginal and Torres Strait Islander languages are living, place-based languages. Words, spellings and pronunciations can vary between Countries, Nations and communities.

The pronunciations provided in this resource are approximate only and are intended as a guide. For accurate local pronunciation and deeper understanding, educators and students are encouraged to engage with local Aboriginal and Torres Strait Islander communities, Elders or language custodians.

Schools are encouraged to identify the local Aboriginal Nation and language of the Country they are on (e.g. using the AIATSIS Map of Indigenous Australia) and, where appropriate, replace or add local language terms with guidance from local Aboriginal Land Councils, community organisations or Elders.

Word	Pronunciation	Meaning	Local replacement (insert local Nation / language term)
Ancestors		Spiritual beings, creation figures and Elders past and present who remain connected to Country.	
Baayami	BY-uh-mee (often said BY-ar-mee)	An Ancestor being in many north-eastern Aboriginal cultures; appears in the Narran Lakes creation story.	
Caring for Country		Indigenous stewardship practices focused on responsibility, reciprocity and long-term care for land, water and living things.	
Country		Country is a holistic concept encompassing land, waters, seas and skies, which inform and are reflected in laws, culture, language, spirituality, family, identity, and ways of living passed down over generations. Country refers to a specific, defined region,	

		rather than Australia as a whole nation. Teacher note: Country is understood as a living entity and is written with a capital 'C' when used in this context.	
Dharriwaa	DAH-ree-wah	Yuwaalaraay name for Narran Lakes, an important cultural and ecological place.	
Dreaming (Dreaming stories)		Stories, knowledges and law that explain creation, relationships, responsibilities and connections to Country.	
Gali	GAH-lee	Yuwaalaraay word for water.	
Gali Gurunha	GAH-lee goo-ROON-hah	Yuwaalaraay term meaning "water in those holes", referring to groundwater and springs in the landscape.	
Gamilaraay (Gamilaraay/Kamilaroi/Gomeroi)	gah-MIL-uh-rye	An Aboriginal language group and People from north-central NSW and southern Queensland.	
Garriya	GAH-ree-yah	A serpent or crocodile being in Yuwaalaraay stories who moves water through the landscape.	
Gilgaays	GILL-gays	Small, shallow waterholes that hold water in the landscape.	
Guru	GOO-roo	Yuwaalaraay word for hole.	
Indigenous Research Methodology (IRM)		A research approach grounded in Indigenous ways of knowing, being and doing, emphasising relationships, story, reciprocity and respect for Country.	
Kamilaroi	KAM-uh-luh-roy	Common alternate spelling of Gamilaraay / Gamilaraay.	
Murri	MUR-ee (like "Murray")	A term many Aboriginal peoples from Queensland and parts of northern NSW use to describe themselves.	
Namoi	NAH-moi	Name of the Namoi River in NSW, important to several Aboriginal Nations.	
Narran	NAH-ran	Name of the Narran River and Narran Lakes area in NSW; a	

		key part of the Murray–Darling Basin.	
On Country		Learning, observing and engaging directly on the land, recognising Country as a teacher.	
Positionality		Awareness of one’s own background, culture and perspective when engaging with Indigenous knowledge and Country.	
Songline		Pathways across Country that record stories, law, navigation and knowledge, often linked to water, landforms and Ancestors.	
Walgett	WOL-get	Town in north-western NSW; the name comes from local Aboriginal languages.	
Yarning		A culturally appropriate way of sharing knowledge through storytelling, discussion and listening.	
Yuwaalaraay (Euahlayi, Uallaroi)	yoo-WAH-luh-rye	An Aboriginal language group and People from north-western NSW.	

Background information: Biodiversity

Biodiversity describes variety in living things. It can be explored at different levels:

- *Genetic – the diversity of genes within a species.*
- *Species – the diversity of species present in an area or habitat.*
- *Ecosystem – the variety of ecosystems in a region.*

The Creation story of Dharriwaa (Narran Lakes) describes the inherent cultural value of a diverse ecosystem. Humans are a part of and are responsible for caring for the biodiversity on Country (Yuwaalaraay Traditional Knowledge, Narran Lake Aboriginal Joint Management Committee, 2017).

“We don’t own the land, we all belong to the land, it is part of us as much of us being part of it. In a family setting, it’s like mother with her child, she will nurture its growth by being responsible for providing the care and this will continue on generation after generation. It’s a cycle of respect, look after one another, look after our trees and waterways, our animals, we all have a place in this, we all have a responsibility with our mother, as she will always look after us and in return, we look after our mother. Take what you need, not what you want, as greed is a form of selfishness, you take, you give back, it’s that simple!”

- Rhonda Ashby, Narran Lake Nature Reserve Aboriginal Joint-Management Committee member (Yuwaalaraay and Gamilaraay, 2017) cited in (Coleman, McKemey, & Coleman, 2017)

This poses a complementary value of biodiversity as compared to western values, which highlight the impacts on humans – where the focus is often on the aesthetic, recreational and economic value. CSIRO’s e-book: Biodiversity: Science and Solutions for Australia list five categories that describe the benefits biodiversity provides. These are:

- **Economic**
 - The provision of raw materials for direct consumption and production. Harvesting timber and fish are examples of this.

- **Ecological life-support**
 - Healthy, functional ecosystems provide essential services to humans and other organisms, such as oxygen, clean water, habitat and food.
- **Recreation**
 - Although this may seem by some to be frivolous, the ability to relax, exercise and take enjoyment in nature has very tangible outcomes for human wellbeing. It can also feedback to economic values, with the opportunity for eco-tourism, for example.
- **Cultural**
 - Individuals will have very different cultural links to nature through art, spirituality, education and historical connections. This is demonstrated particularly strongly through Indigenous relationships with land.
- **Scientific**
 - Scientists are driven to collect ecological data to help understand the natural world. This can lead to the ability to make predictions, prevent natural disasters, or add to economic value, as well as to sate natural human curiosity.

In this investigation, you will use the Indigenous Research Methodology (IRM) based on (Moggridge, Thompson, & Radoll, 2022) to investigate the diversity of life in your local environment (e.g. school grounds, local parkland).

You will examine the evidence of different life forms on site and take time to understand and be part of the Country you are on, by paying attention to the life that inhabits it.

Classroom PowerPoint (PPT) presentation guide – Biodiversity

Consult the equipment lists (Investigation: Biodiversity - Page #10) provided in each investigation and adjust resource quantities according to student or group numbers.

Indigenous Research Methodology (IRM)	Slide # Classroom PowerPoint Presentation (PPT) Page # (Student Workbook)	Activity
	Slide 2 Pages 3-4	Teacher reference slide - IRM. Student reference page –IRM and icon explanation.
	Slide 3	The Indigenous Research Methodology (IRM) – We encourage educators to watch the IRM explanation video prior to exploring the investigation. <i>Optional: Share the video with your students.</i>
1. Connecting with Country	Slide 5-8 Pages 6-8	<p>Note: questions and talking points for each section can be found in the presenter notes</p> <p>Connecting on Country – explanation of the first stage of the IRM (Slide 5).</p> <p>Ask: What place in nature makes you feel connected or calm? (Slide 6)</p> <p>Introduce students to the deep, spiritual connection Aboriginal and Torres Strait Islander Peoples have with Country, and to reflect on their own sense of place.</p> <p>Acknowledgement of Country – find out the Traditional Owner and language groups of the Country you are living and learning on via Map of Indigenous Australia (Slide 7)</p> <p>Class Discussion – What does ‘Country’ mean to Aboriginal and Torres Strait Islander Peoples? Record key words, e.g. land, water, sky, spirit, family, language, care, belonging. See Appendix A for activity ideas and links (Slide 8).</p>

Slide 10-15
Pages 9-10

Dreaming stories – discuss dreaming stories with the students. What Dreaming stories do they know? What do they tell us about Country?

Students complete Pages 6-8 in the student workbook.

Discuss Dreaming Stories students have heard/know of – consider what they tell us about Country.

Watch the Dreaming Story of Narran Lakes (Slide 9).

Note: *questions and talking points can be found in the presenter notes*):

Part 2 – Dharriwaa Living with Climate Change.
(Dreaming Story: 3:00 – 5:00)

<https://www.youtube.com/watch?v=F2zDk3Tv36Q>

Class discussion/small group discussion e.g. Think, Pair, Share – What is biodiversity and why is it important to Country?

- Discuss how Aboriginal and Torres Strait Islander Peoples protect plants, animals, and ecosystems through traditional knowledge and sustainable practices.

Brainstorm how we can understand biodiversity in our local area.

On-Country Learning – explanation of the second stage of the IRM (Slide 10).

Students will learn on Country by conducting a biodiversity survey on their school grounds.

Whole group discussion (Slide 11)–

- What is the importance of biodiversity in an ecosystem?
- Whose responsibility is it to care for the diverse life forms in our environment?
- Which areas of the school have the most biodiversity?
- Why do those areas have significant amounts of biodiversity?
- How can humans increase/decrease the amount of biodiversity?

Share the Yuwaalaraay Dreaming Story: Story of the Flowers (Appendix A or Slide 12-presenter notes).

		<p>Commence investigation - Which areas of the school have the most biodiversity? (Slide 13)</p> <p>Planning the investigation – (Page 9 Slide 14) Begin planning the investigation by identifying the variables and writing a prediction.</p> <p>Students select different locations in the school to observe and quantify the evidence of life. They consider how development and planting choices impact biodiversity and how they could improve the biodiversity of their environment</p> <p>Equipment (per group)</p> <ul style="list-style-type: none"> • Biodiversity survey (Page 11) • Tape measure • Magnifying glass • Site map e.g. school map or google maps <p>Procedure - Complete Slide 15, Page 10</p>
3. Knowledge Recording	<p>Slides 16-17 Page 11</p>	<p>Investigation continued:</p> <p>Students complete the ‘Results – Biodiversity survey’ (Page 11). Instructions can be found in the student workbook and on the respective slides in the classroom PPT (Slides 16-17)</p> <p>Students can collect knowledge in the forms of taking notes, collecting data in a table, for a more detailed survey, see School Grounds Audit. They may also like to: map their observations, learn Indigenous Languages, or generate sound recordings.</p>
4. Tool making and resources	<p>Optional activity – teacher led. Page 12</p>	<p>Students create biodiversity overview of school grounds. May also create site maps, sound recordings, rubbings or collage of plants.</p>
5. Reflection and evaluation	<p>Slide 18 Pages 13-15</p>	<p>Students reflect on how they could positively impact the diversity of life on school grounds.</p> <ul style="list-style-type: none"> • Where did you see the most/least biodiversity? • Were there any surprises? • How does the biodiversity on school grounds impact us and other living things that use the school? <p>Glossary (Slide 21, Page 38) – teacher to determine whether students populate the glossary independently or through explicit instruction.</p>

Additional resources

Indigenous Research Methodology (IRM)	Slide # <i>Classroom PowerPoint Presentation (PPT)</i> Page # <i>(Student Workbook)</i>	Activity
	Page 27-37	For students engaging in an independent science investigation for Biodiversity provide the 'Science Investigation Planner' pages to guide them through their independent investigation.
Optional Supplemental Resources	Pages 16-21	Process diary – optional
	Slide 19 Pages 22-23	Presentation plan and notes – Optional
	Slide 20 Page 24-25	Project reflection – Optional
	Page 26	Take it further – Optional extension activities
	Pages 38-43	Page 39 – Notes Pages 40-41 – Research Journal Page 42 – Graph paper (5mm) Page 43 – Graph paper (10mm)

Supplemental teacher resources

- [Bedtime Stories | Common Ground](#)
- [What Is Country? | Common Ground](#)
- [Sounds of Narran: waterbirds calling at Narran Lakes \(Dharriwaa\) on the Lower Balonne floodplain - Flow-MER](#)
- [Fact sheets - Field of Mars Environmental Education Centre](#)
- [Bird profiles - BirdLife Australia](#)
- [Explore by location – Atlas of Living Australia](#)
- [Invertebrate Key](#)

Videos - Dharriwaa Living with Climate Change videos

- [Part 1 - Dharriwaa Living with Climate Change](#)
- [Part 2 - Dharriwaa Living with Climate Change](#)
- [Part 3 - Dharriwaa Living with Climate Change](#)

Professional development

- [8 Aboriginal Ways of Learning](#)
- [Narragunnawali - Caring for Country](#)
- [Professional Development for Educators | Ngarrngga | Ngarrngga](#)
- [Narragunnawali - A Matter of Perspective](#)

Risk assessment

A risk assessment has been provided for this activity. However, it is recommended to hold a class discussion regarding the possible risks and mitigation strategies prior to starting the activity. Appropriate PPE should be worn during this activity. Caution students should be supervised while collecting data outside.

Activity	Inherent Risk	Elimination or control measures
Collecting data outside	Weather exposure	Take appropriate precautions according to weather conditions, e.g. raincoat, hat, sun lotion, minimal skin exposure.
	Slips, falls, abrasions, insect bites	While outside, students be advised of possible risks- slipping on wet ground, trips and falls etc, advise all students to observe insects, arachnids and other animals but not to touch. Adults supervise students during data collection.

EXAMPLE – Indigenous Research Methodology IRM – Biodiversity – Lesson overview

Lesson	Lesson Duration	Main focus & activities	IRM stage
1. Connecting with Country & Biodiversity	60 min	Acknowledgement of Country. Introduce biodiversity and IRM. Students reflect on personal connection to place and discuss what biodiversity looks like on Country. Yarning about why living things belong where they do.	Connecting with Country, Positionality
2. Stories, Observation & Biodiversity Knowledge	60 min	Engage with provided Indigenous stories/knowledge related to Country and living systems (unchanged). Students identify what the stories teach about plants, animals, seasons and relationships. Link to biodiversity indicators.	Yarning, Story as knowledge
3. On-Country Biodiversity Survey	60 min	Students investigate biodiversity on school grounds using quadrats or site surveys. They observe, identify and record plants, animals and evidence of life in different locations.	On-Country learning, Observing
4. Recording Knowledge & Mapping Biodiversity	60 min	Students organise results into tables, annotated maps or photo records. They compare biodiversity between sites and identify patterns (e.g. shade vs sun, grass vs concrete).	Recording knowledge, Toolmaking
5. Analysing Patterns & Ecosystem Connections	60 min	Class discussion: What patterns are emerging? How does biodiversity support ecosystem health? Link to Indigenous indicators of Country (unchanged references).	Knowledge sharing, Sense-making
6. Biodiversity, Change & Threats	60 min	Students explore factors affecting biodiversity (human impact, drought, land use). Connect Indigenous knowledge of change over time with scientific explanations.	Observation over time, Systems thinking

7. Caring for Country – Recommendations	60 min	Students propose realistic actions to protect or enhance biodiversity on school grounds (e.g. planting, habitat creation). They justify actions using data and Indigenous knowledge.	Reciprocity, Giving back
8. Reflection & Communication	60 min	Students communicate findings (poster, presentation, video, yarning circle). Reflect on learning through IRM and how their view of biodiversity and Country has changed.	Reflection & Evaluation
9. Connecting with Country & Biodiversity	60 min	Students investigate biodiversity on school grounds using quadrats or site surveys. They observe, identify and record plants, animals and evidence of life in different locations.	Connecting with Country, Positionality

Appendix A Connection to and observation of Country – Activities

A.1 Yuwaalaraay Dreaming Story: Story of the Flowers

Yilaalu (a long time ago) cool grass and fragrant bright flowers grew across the land. Native bees came to the gurayn (flowers) and there was always plenty of warangana (honey).

The drought came to the land and the flowers withered and died.

The bees left the land to live in the sacred trees. People weren't allowed to touch these trees as they were sacred and belonged to Baayami (Creator). There was no more Warangana for the people. The mothers worried for their children in this time of drought.

The mothers had no sweet food to soothe their children.

Baayami sent the giidjaa (black ants) to bring sweet gunbiyan (sugar specks) to grow on the leaves of the Bimbil box tree, the little grey Dhaluraa (grey white browned woodswallow bird) to bring sweet sugar(liquid manna) to the coolabah tree.

Wiringun (clever men) travelled to a sacred mountain. Baayami spirit messengers lifted the Wiringun into Bulima (sky camp) to the sacred Yuluwirri (rainbow) gardens. Wiringun scooped up handfuls of colourful gurayn to take them back to Gunimaa (Mother Earth) and scattered them around.

The bees from the sacred garden swarmed and called out to Yarraga (Spring wind) to bring the rain and to end the drought. Once again cool grass and fragrant bright flowers grew across Gunimaa. The bees returned to the land and there was plenty of honey again.

- Rhonda Ashby (Narran Lakes Aboriginal Joint Management Committee) 2017.

A.2 Observe Country

- Sit or lie down in an open area and close your eyes. What do you notice? Smells, sounds, light? Create art upon 'waking'.
- Make a soundscape, sit in silence with a book/sheet of paper. Position yourself in the centre of the paper and sketch/note the natural sounds you hear, positioning them on the page in the same relative position. If weather does not permit, consider a recording e.g. Sounds of Narran: waterbirds calling at Narran Lakes (Dharriwaa) on the Lower Balonne floodplain - Flow-MER
- Choose a feature of the ecosystem to draw – a tree, animal, rock formation. Make rubbings of rough bark, leaves or rock-faces.
- Go on a traces hunt. Some animals are hard to find, but you can see their traces – look for scratches in the dirt, chew marks in leaves or gumnuts or scat. Try to work out which animals left them.

A.2.1 Consider

“I grew up around the Walgett district with five brothers and four sisters; we spent a lot of time around the Namoi River with family and friends. I remember the river water being clear and you were able to see the bottom where we used to dive for mussels, fished, played water games and bathed. We collected snotty gobblers and gum sap off the trees nearby. Being on the riverbank was also a form of meditation, listening to the bird life, hearing the water flow and the smell of eucalyptus and gum trees. Rivers and lakes like the Narran provided life for the natural environment and its habitat, most importantly, the wellbeing of the people.”

- Rhonda Ashby, Yuwaalaraay and Gamilaraay (Fabila, et al., 2025)

- What non-living things did Rhonda pay attention to?
- What living things did she notice?
- What things did she know how to use?
- Consider the Country you grew up on – what did you notice? Are there similarities/differences?

A.3 Watch:

- [Dharriwaa Narran Lakes Living with Climate Change](#)
 - What did you notice about how Jason, Allan and Brenda spoke about Country?
 - What plants/animals did you notice in the video?
- [Through Our Eyes - Native Foods At Narran Lake with Brenda McBride \(Dharriwaa\)](#)
 - What living things does Brenda notice?
 - Do you see Country the same way as Brenda? What is similar or different to the way you look at Country?

A.3.1 Link:

- [What Is Country? | Common Ground](#)

A.3.2 Discuss:

- Class/small group discussion e.g. Think-Pair-Share
 - What do you know about Country?
 - Are there any indicators of Country that tell you changes are coming – e.g. when season change, leaves fall from trees, the smell before rain, when magpies swoop.

References

- Coleman, K., McKemey, M., & Coleman, P. (2017). *Narran Lakes Nature Reserve Education Package*. NSW: Narran Lake Nature Reserve Co-Management Committee.
- Fabila, M., Moggridge, B., Braedon, P., Akeroyd, M., Connolly, M., Court, Z., & Gilbey, S. (2025). *Indigenous research methodology for drought resilience*. Australia: CSIRO.
- Moggridge, B., Thompson, R., & Radoll, P. (2022). Indigenous research methodologies in water management: learning from Australia and New Zealand for application on Kamilaroi country. *Wetlands Ecology and Management*, 30(4), 853-868. Retrieved from <https://doi.org/10.1007/s11273-022-09866-4>
- Pol, G. (2023, December 14). *What is Country?* Retrieved from Common Ground: <https://www.commonground.org.au/article/what-is-country>

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