



Ecology | Environment | Heritage



Capability Portfolio

Redleaf Environmental provides environment and heritage solutions for engineering and design firms, mining and energy companies, government departments and local government organisations. We serve Queensland and NSW regional centres.



Connecting people, places and wildlife through understanding our natural and built environments.

www.redleafenv.com.au





An introduction to Redleaf Environmental

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Redleaf Environmental is a national consultancy covering multiple disciplines in ecology, environment and cultural heritage assessment. We provide cost-effective, workable solutions to manage environmental and cultural heritage risks of your project.

Redleaf Environmental employs staff across regional Queensland and NSW, ready to travel anywhere in Australia. We work on the initial stages of project development to identify project risks early and to develop effective mitigation strategies for the natural and cultural heritage values. We liaise with regulators on your behalf to ensure approvals are secured. We also design and implement monitoring and environmental audit programs to ensure the continued effectiveness of environmental standards as might be applicable on a project-by-project basis.

Our team is passionate and committed to your project and long-term sustainability. We have the right people with the right experience to give you a high quality outcome at workable costs. Redleaf Environmental provide you with a reliable and easy to work with team of specialists.

Why Redleaf Environmental?

- experienced professionals
- highly trained field team
- complete service, hassle free approach
- cost effective scientifically based outcomes
- personal and responsive service model

Ecological Risk Assessment

We manage ecological risk early in a project and work with you to define practical pathways to move projects forward, in the right direction.



**We serve
Queensland
and NSW
regional centres.**



Our experience and expertise

Redleaf's team of environmental scientists and cultural heritage officers have extensive experience working with engineering and design firms, mining and energy companies, government departments and local organisations.

We are there from the outset of your project to help you with any required environmental or cultural heritage approvals and clearances. Bring us in early to avoid costly mistakes or overly long approvals time frames.

Once we are involved in your project, we provide you with timely advice and services throughout the life of the project. Use our experts like surgeons to perform critical tasks to keep the project performance running high.

Our down to earth staff have the ability if required to be the complete service option for you through our established networks.

Our team offers a personalised service and hassle-free approach to your project.

Above and beyond what's expected to deliver innovative results and maximise outputs. Together in partnership and good communication with our clients and key stakeholders, we lift a project from every-day to exceptional.

We offer an integrated team of experts in ecology, environment and heritage to support the management of Australia's unique natural resources and heritage landscapes. Being a motivated team, we aim to provide excellence for every project. This means being committed to get the very best outcomes.

Visit our website and get to know our team
www.redleafenv.com.au

We are passionate about sustainable planning and development for our Australian landscapes.

Our Services

Environmental Impact Statements (EIS)

- Fauna and flora EIS chapters
- EPBC Matters of National Environmental Significance (MNES)
- Desktop investigations
- Threatened species – flora and fauna surveys
- Habitat suitability assessments for fauna and flora and critical habitats
- Aquatic ecology – fish, turtles, platypus, macroinvertebrates
- Bat surveys
- Identification of project impacts and mitigation measures
- Professional reporting, data presentation and referencing, including GIS

Environmental Approvals

- Assessments and referrals
- Erosion and Sediment Controls
- Desktop investigations
- Field surveys
- Identification of potential impacts and mitigation
- Legislative review
- Environmental compliance
- Environmental management plans (EMP)
- Environmental auditing

Fauna Spotter Catcher

- Fauna spotter / catcher (koala)
- Field investigation of animal breeding places
- Habitat condition assessments
- Species Management Plans / Programs (SMP)
- On-ground implementation of SMP guidelines during and after construction

Biodiversity Offsets

- Strategic offset identification
- Ecological equivalence tests of potential offset sites
- Guide you through the legislative mechanisms and processes
- Ongoing ecological monitoring

Monitoring and Rehabilitation

- Receiving Environment Monitoring Program (REMP)
- Aquatic surveys, macroinvertebrate (AusRivAs), fish, vertebrate fauna
- Water quality
- Artificial wetland or pond design and implementation
- Site remediation and rehabilitation plans
- BioCondition vegetation monitoring

Cultural Heritage

- Duty of Care Aboriginal Cultural Heritage requirements
- Archaeological investigations
- Database searches
- Traditional owner liaison and consultation
- Reporting and GIS data

Scientific Research

- Expert Scientific Panels
- Workshop Facilitator
- Lead high calibre scientific investigations into any environmental aspect relating to the industry
- Conduct long-term monitoring and rehabilitation plans
- Implement scientific experiments to develop practical solutions to problems
- Innovate and transform projects through sustainable practices for future generations of Australians





Redleaf Environmental understands the challenges and needs of regional businesses and local governments. We have worked in partnership with engineering, mining and construction companies on billion-dollar projects.

The following are some of the projects that we have been proudly associated with over the past few years.

Selected projects

Wildlife corridor mapping at a local government scale

Toowoomba local government area, South East Queensland

Redleaf was able to map at a local government scale biodiversity corridors and potential rehabilitation areas. The project integrated the results of seven focal fauna species and guild models into a corridor design network. Each focal species is modelled through the ArcGIS platform using datasets and scientific knowledge of species biology to calculate habitat patches, population patches and to provide a basis for a linkage corridor network across a study area.

Middle Road, Civil Project

FK Gardner, NDRRA Funding, Crows Nest

Fauna spotter catcher and fauna clearance surveys for several kilometres of road was required by FK Gardner. The project was the direct result of significant flooding in 2010/11 landslides causing significant damage, rendering the road impassable to traffic.

Proposed Rail Alignment Survey from Galilee Basin to Abbot Point – Flora and Fauna

Waratah Coal

Helicopter-based survey of the propose rail alignment examining habitat quality for fauna and areas of remnant vegetation.



Flora and fauna surveys for CSG in the Surat Basin

Client: various

The Redleaf Environmental team have undertaken flora and fauna surveys for numerous sites and operations across the Surat Basin.

- Fauna surveys for upstream tenements - EIS Environment Chapter
- Over 200 wetland inventory and GIS surveys along with expert advice to QGC, Surat Basin (Chinchilla, Miles, Surat, Roma, Injune, Wandoan)
- Species Management Plans and rehabilitation planning for upstream and downstream components of the QCLNG Project - fauna and flora
- Fauna surveys for main export pipeline, Surat to Curtis Island
- Fauna surveys and environmental assessments for the proposed Alpha mine site and railway corridor to Abbott Pt near Bowen, Qld.

Species Management Program for threatened species at Grigor Bridge crossing on the Mary River at Conondale

RoadTek, Department of Transport and Main Roads

Redleaf Environmental developed a Species Management Program (SMP) for the Mary River Turtle (*Elusor macrurus*, Endangered) along with fish, platypus and microbats. This included the use of fyke nets, fish traps and turtle traps. Redleaf Environmental also designed and installed bat roosts under the new concrete bridge structure to offset the loss of the old timber bridge.



Greer Bridge Civil Works

Lockyer Valley Regional Council, Helidon Spa, Toowoomba Second Range Crossing

Environmental assessment, flora and fauna survey to gain appropriate approvals and permits prior to restoration of the damaged bridge structure and creek bed and banks. This work was undertaken along with 18 other bridge assessments across the Lockyer Valley.

East Creek Waterway Barrier Assessment

Toowoomba Regional Council, East Creek, Toowoomba

Waterway barrier assessment of East Creek in Ballin Drive Park, Toowoomba. This involved civil construction of flood mitigation detention basins on East Creek and a fish passage assessment of native species under the Fisheries Act 1994.

Rockmount Road deviation - Environmental Impact Study (EIS)

Lockyer Valley Regional Council

Flora and fauna survey of a road corridor realignment including quantification of koala and Glossy-black Cockatoo habitat (threatened species).

Rockmount Road Deviation – Archaeological investigations

Lockyer Valley Regional Council

Redleaf Environmental's principal archaeologists conducted expert investigations to identify the presence of Aboriginal cultural heritage values along the road alignment route. This also involved liaison with council and traditional owner groups.



LOCKYER VALLEY REGIONAL COUNCIL

"Redleaf Environmental demonstrated a high standard of skills in flora and fauna assessment, threatened species management and the requirements for cultural heritage clearances for small scale road construction projects. On the Rockmount Road Deviation EIS project, Redleaf provided a cost effective result and achieved an appropriate balance between the project and environmental needs."

GRAHAM JORDAN

Program Management Coordinator, Lockyer Valley Regional Council

Species Management Program for Threatened Wallum Frog Species in SEQ Ergon Energy

Ergon Energy required the development of a Species Management Program in accordance with State Nature Conservation Act 1992, guidelines to mitigate possible harm that may occur as a result of Ergon activities, including new works, maintenance and emergency call outs. The plan focuses primarily on the conservation of breeding places as required under the Act.



Harry Hines



GILBERT DIVING

"I was impressed with Redleaf Environmental's ability to undertake aquatic fauna clearances in a safe manner at construction sites and importantly demonstrating results for our clients. Their ability to capture aquatic fauna including turtles, fish and platypus in the Mary River was outstanding. I found their team to be professional and easy to work with."

JOHN GILBERT

Managing Director, Gilbert Diving

Environmental Impact Assessment for a proposed Bio-energy Venture Pentland, FNA

Renewable Developments Australia (RDA)

\$1.5B proposed Bio-energy Venture on several cattle stations (Milray, Hot Air, Helenslee) near Pentland, FNQ. This project was across 690 km². This was a comprehensive fauna and flora study including over 100 tertiary level vegetation mapping and BioCondition assessments of Regional Ecosystems and TECs. During the 3 week survey across 690 km², over 1400 individual vertebrate fauna records were made from over 150 survey sites along with surveying and mapping of 5 MNES species habitats across the study area. The MNES species were koala, squatter pigeon, ornamental snake, black-throated finch and king bluegrass.

Traditional owner liaison and negotiations – Palmer Bridge

Southern Downs Regional Council

Our archaeologists (cultural heritage officers) conducted site inspections and traditional owner clearances for a bridge site near Warwick. Several axe grinding grooves were identified and protected from harm during the new bridge construction.



List of recent Redlead project reports

A snap shot of our projects and repeat business. You are more than welcome to contact our clients for their thoughts.

Client	Title	Year
Northern Tablelands LLS	Turtles Forever: Securing Australia's wild populations of Bell's Turtle. Saving our Species Partnerships Grant	2020
Toowoomba Regional Council	Mapping of Matters of Local Environmental Significance (MLES)	2020
Ipswich City Council	Protected flora surveys across the council's bushland reserves	2020
Scenic Rim Regional Council	Beaudesert Business Park, Beaudesert, Queensland - Cultural Heritage Duty of Care and Native Title Assessment	2019
Department of Environment and Science	Assessing Development Risks to the Ecological Values of the Free Flowing Rivers of Kati Thanda-Lake Eyre Basin (Qld). An Independent Scientific Expert Panel Report	2019
Southern Downs Regional Council	Condamine Gorge Creek Crossings, The Falls, Queensland - Cultural Heritage Duty of Care and Native Title Assessment	2019
Decmil	Construction Noise & Vibration Assessment for Chinchilla Warrego Highway Upgrade Program	2019
4C Optimised Solutions	Deebing Heights Mission Site, Ipswich, Queensland - Cultural Heritage Duty of Care and Native Title Assessment	2019
West Talgai Feedlot	Ecological Assessment of the Proposed Expansion of West Talgai Feedlot, El-linthorp	2019
New Hope Group	BioCondition assessments for the New Acland Coal Mine	2019
EdenTech	Firebreak Trails in Canungra Field Training Area, Canungra Protected Flora Survey Report	2019
Southern Downs Regional Council	Flying Fox Management Plan	2020
Toowoomba Regional Council	Grant Road Quarry Pit Impact Management Plan	2019
Jacobs	Haul Road Traffic Noise Assessment: 1 Lot into 34 Lot Proposed Subdivision - 226 Pindari Drive Mount Marrow	2019
GHD	Heritage Report Queens Park Margaret St Playground	2019
NSW Office of E&H	Manning River Helmeted Turtle 2019 Autumn Survey Report	2019
GHD	Queens Park Master Plan Implementation Tree Protection Plan	2019



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Scenic Rim Regional Council	Beaudesert Business Park, Beaudesert, Queensland - Cultural Heritage Duty of Care and Native Title Assessment	2019
Scenic Rim Regional Council	Review of Environmental Factors: Beaudesert Business Park, Beaudesert, Queensland	2019
Southern Downs Regional Council	Storm King Dam Raw Water Pipeline, Stanthorpe, Queensland - Cultural Duty of Care and Native Title Assessment	2019
Toowoomba Regional Council	Contaminated Lands Report for PFAS Contamination: York Street, Oakey QLD	2019
Braith Vidler Holdings	Bushfire Management Plan: 36 Hecklemann St, Carina Heights Queensland	2018
Toowoomba Regional Council	Environmental Impact Assessment of 379 Love Road, Wyreema: For the Proposed Toowoomba South Waste Transfer Facility	2018
BMD Constructions	Hotel Taxiway Brisbane Airport, Culvert Extension - Fauna Spotter Catcher Report 4, March 2018	2018
RoadTek	Aquatic fauna clearance on Pullen Pullen Creek at Anstead as part of bridge maintenance .	2017
Aquatic Biopassage Services	Fishway Monitoring at Dry Creek O'Mara Road	2017
GHD	Heritage Exemption Permits & Development Approval for proposed works within Queens Park	2017
Toowoomba Regional Council	Mort Street Connection Upgrade Contaminated Site Report: Directional Drilling of Stormwater Pipe Lot Plan 13/SP117157	2017
Wood	Threatened ecological community and threatened flora surveys of 10,000 ha of proposed coal mine in FNQ, Pentland.	2017
Renewable Developments Australia	Environmental Impact Study 2016 wet season ecological survey – FNQ Pentland Bioenergy Venture	2016
Department of Transport and Main Roads	Peer Review: Fauna Interaction Report 28/6/2016, and Additional Information – Management of Bats Roosting in the Caboolture River Bridge	2016
Thiess and Leighton Contractors	Toowoomba Second Range Crossing, No Tunnel Option: Expert Environmental Appraisal	2015
Scenic Rim Regional Council	Review of Environmental Factors: Beaudesert Business Park, Beaudesert, Queensland	2019
Southern Downs Regional Council	Storm King Dam Raw Water Pipeline, Stanthorpe, Queensland - Cultural Duty of Care and Native Title Assessment	2019
Decmil	Warrego Highway Upgrade, Chinchilla - Fauna Spotter Catcher Report	2019
Toowoomba Regional Council	Fauna Assessment of Ballin Drive and Garnet Lehmann Parks Detention Basins: Gowrie Creek Catchment Flood Mitigation Project, Toowoomba	2019
Braith Vidler Holdings	Bushfire Management Plan: 36 Hecklemann St, Carina Heights Queensland	2018
Toowoomba Regional Council	Environmental Impact Assessment of 379 Love Road, Wyreema: For the Proposed Toowoomba South Waste Transfer Facility	2018
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ROADTEK, DEPARTMENT OF TRANSPORT AND MAIN ROADS

"Redleaf Environmental were engaged to undertake fauna clearance works for our bridge construction and bridge demolition works.

Working together with Redleaf staff and management over the project duration was a very pleasant experience. The expertise shown from Redleaf in various fields was second to none. Redleaf are very passionate and knowledgeable regarding fauna management and ensured compliancy with the relevant regulations and specifications were met. Redleaf provided a very high level of service including a strong emphasis on safety and customer service."

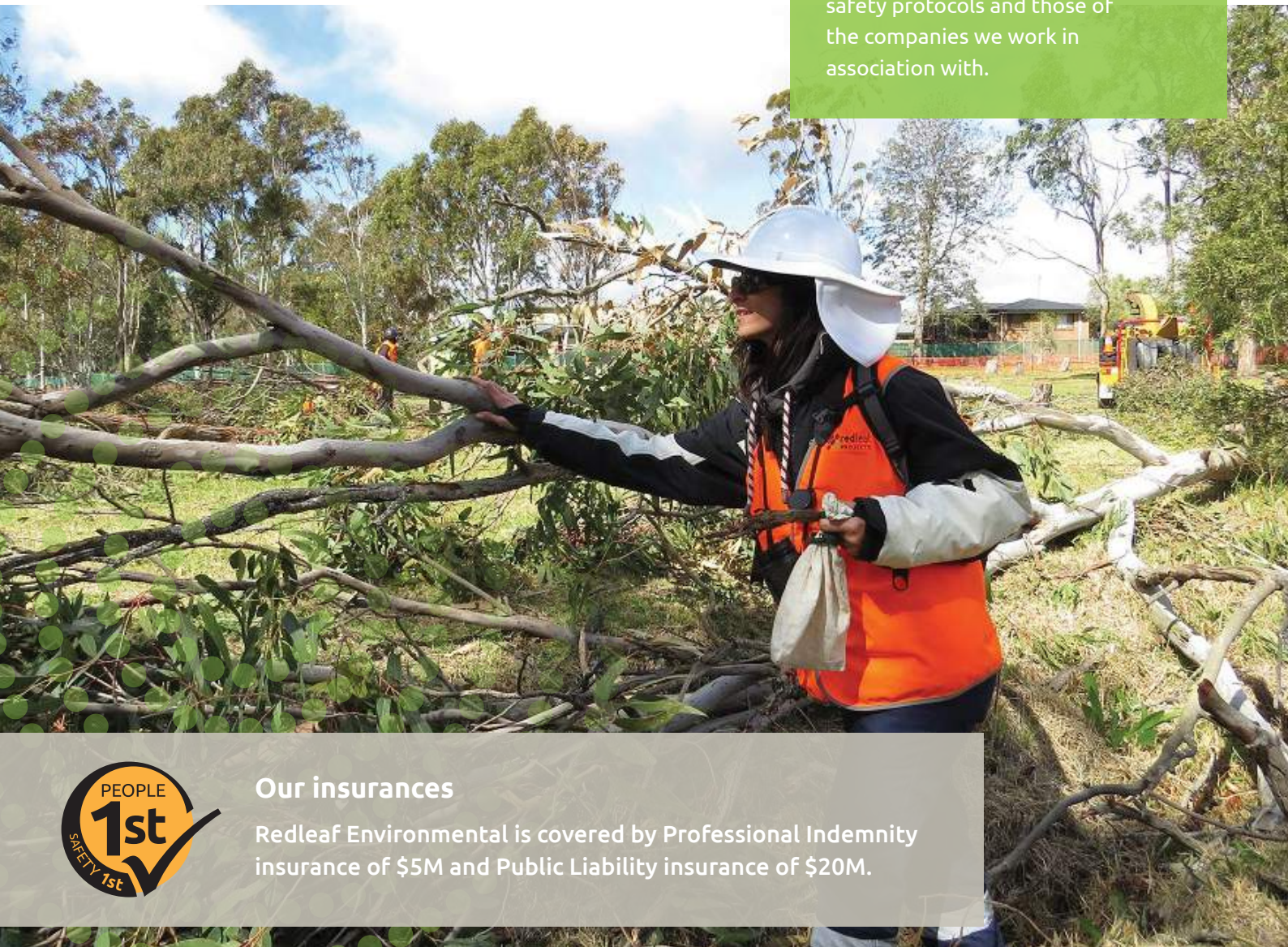
PETER ALLIE

Project Manager, RoadTek



Workplace Health and Safety

We proudly maintain our record of Zero Days Lost, through strict adherence to OHS legislation which we implement through our own safety protocols and those of the companies we work in association with.



Our insurances

Redleaf Environmental is covered by Professional Indemnity insurance of \$5M and Public Liability insurance of \$20M.



Leadership team

Our highly qualified and well respected leadership team at Redleaf Environmental have extensive experience in working on engineering, mining and government projects. Our management team builds confidence with years of practical field experience.



Dr Darren Fielder is a highly respected scientist from a 25 year career in conservation planning, impact assessment and ecological investigations. Darren has developed a high level of project management skills and has led multi-disciplined teams on major projects across Queensland and NSW. Recently, Darren was engaged by the Queensland Government to facilitate and chair an Independent Expert Scientific Panel (SEP) on Assessing Development Risks to the Ecological Values of the Free Flowing Rivers of Kati Thanda-Lake Eyre Basin (Qld). The SEP consisted of eminent scientists from across Australia to discuss the potential impacts of conventional and unconventional coal seam gas, mining, agriculture, industry and tourism to the Cooper Creek, Diamantina and Georgina River Catchments of central western Queensland. From his career in state government roles, he pioneered many of the conservation planning tools now well entrenched in Queensland's regulatory and planning processes. Darren was instrumental in the development of two significant conservation mapping and planning decision support tools: Biodiversity Planning Assessments (BPAs / BAMB) and Aquatic Conservation Assessments (AquaBAMB). He was a co-author of the AquaBAMB which his team applied to the Queensland Murray-Darling Basin catchments, the Lake Eyre Basin, Brisbane City Council and NSW Murray-Darling Basin catchments.

Darren is a nationally recognised freshwater turtle specialist and continues to maintain his research focus through publishing peer reviewed scientific journal articles. He is regularly invited to contribute to national and state programs in Queensland and NSW. He has provided expert input to the Queensland Wetland Program since its inception and participated in several national programs including the Sustainable Rivers Audit, Ground Water Dependent Ecosystem mapping and many more. He is also an excellent facilitator of scientific workshops having delivered over 27 two-day workshops for over 240 scientists.



Ms Sarah Grady is an Environmental Scientist with 14 years of experience across a range of projects. Sarah has prepared wastewater and waste management plans for sites across QLD and NSW for Residential, Commercial and Local Government projects. Sarah has completed numerous vegetation assessments including for a proposed coal mine in FNQ (10,000 ha), Defence (Shoalwater Bay, 134 km of roads), multiple road and linear infrastructure projects across Queensland and NSW, feedlots, quarries and commercial developments. Sarah has also conducted protected flora surveys for a range of projects. Sarah has completed MNES / MSES significant impact assessments for threatened species and ecosystems (TECs) and undertaken weed surveys for linear infrastructure projects. Sarah is an experienced fauna spotter catcher. Sarah has a background in environmental science and has experience in dealing with local, state, territory and federal government departments. Sarah has experience in Environmental Impact Assessments and Ecological Assessments for hard rock quarries, feedlots and rural and residential subdivisions. Sarah has assisted clients with Erosion and Sediment Control assessments and Environmental Management Plans.



Ms Alyssa Madden has extensive experience in preparing Historical Impact Statements (HIS), Duty of Care Assessments under the Aboriginal Cultural Heritage Act 2003, Native Title due diligence assessments, and has been involved with reviewing preclearance surveys including new and existing road corridors. As an archaeologist, Alyssa has conducted field excavations at the Willandra Lakes National Park, Royal Bull's Head Inn, Native Police Camp sites in Cape York Peninsula and Condamine, as well as various sites in Toowoomba. Liaison with key stakeholders, lithic analysis, field survey, geophysical survey, zooarchaeology, and Geographical Information Systems (GIS) are other skills held by Alyssa. She has also lectured as the course examiner for "World Archaeology: An Introduction" offered through the University of Southern Queensland. She was completed in a sensitive, respectful and professional manner that not only gathered archaeological data, but ensured outcomes for the community. Through these experiences, she has a greater understanding of working relationships with Traditional Owners.



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