

Bush Heritage Knowledge Strategy

Bush Heritage Australia is a science-based conservation organisation committed to working with Aboriginal, academic, government and non-government partners – both on and off reserves. We use best-practice principles and methods to understand and protect our unique ecosystems and their plants and animals. We take a pro-active experimental approach to the development of new technology and methods where needed. We recognise the value of collaboration with Traditional Owners, academics, like-minded NGO's, agricultural experts and community members to further our work. This Knowledge Strategy was developed as a tool to help potential collaborators to understand our priority areas for research and how we may work together for a better knowledge base.

All of our scientists and academic partners are required to follow the Code of Ethics for Aboriginal and Torres Strait Islander Research (the [AIATSIS Code](#)) prepared by Australian Institute of Aboriginal and Torres Strait Islander Studies. Above and beyond these guidelines, Bush Heritage expects our science to be undertaken using an approach that embodies respect and encourages a richer outcome - a “right-way science approach”.

We are working to embed the “[right-way science approach](#)” in every project. The right-way science approach recognises and embraces multiple knowledge systems, particularly those of Aboriginal Australians. It is defined by respect, trust and sharing. Blending knowledge systems and approaching collaborative work with our partners the 'right-way' can build trust and relationships, and support culture for everyone involved, as well as deliver better science outcomes. Bush Heritage recognises that as we stand in Australia, we stand on Aboriginal ground. We recognise the sovereignty, the connection, and the knowledge of Traditional Owners across the country and understand that our science is stronger if approached the right way. Right-way Science works best when partners are able to identify shared goals from the outset and our Science team have developed this Knowledge Strategy to provide a transparent record of our research needs and to help collaborators and partners identify areas where we might work together.

As a landscape-scale conservation organisation, working since 1991 to protect Australia's habitats and species, we bring to bear the weight of knowledge to not only understand the current situation but also foresee future threats. We are constantly looking to build greater resilience to the threats nature will face into the future.

Our science principally focuses on four areas, each pivotal to our work, and which collectively address key conservation issues in Australia:

1. **Reconnecting Landscapes:** Studying functional connectivity, how habitat loss and fragmentation affects plants and animal populations; developing methodologies for land restoration and threat management for the future to achieve ecosystem health in the face of climate change;
2. **Cultural Values and Knowledge:** Developing ways to protect, recognise and respectfully blend traditional knowledge, values and expertise with western knowledge, and ways for better planning, prioritisation and evaluation of management actions while reconnecting people to nature and to their country;
3. **Protecting Species in our Landscape:** Identifying key species that act as drivers and/or indicators of ecosystem health across our landscapes, testing proactive strategies for species protection, embedding right-way monitoring techniques (including techniques informed by traditional ecological knowledge), and identifying and protecting key refugia that will provide safe havens for species and ecological communities into the future;
4. **Reducing the impact of Feral and Over-abundant Native Species:** Understanding the impact nationally and locally of pest species, including additive impacts and species interactions; and developing and testing effective, safe and humane management strategies.

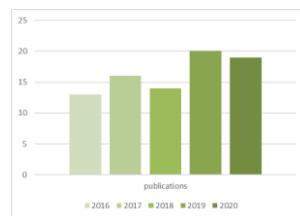
We work collaboratively with all our partners across the sectors and work to ensure, wherever possible, that the knowledge needs of our partners are considered in our reserve plans and in our Knowledge Strategy.

Two additional useful links:

- Ethical conduct in research with Aboriginal and Torres Strait Islander Peoples and communities (prepared by the National Health and Medical Research Council).
- Mobilising Indigenous Knowledge for the Collaborative Management of Kimberley Saltwater Country (prepared by the West Australian Marine Science Institute).

The knowledge needs for each reserve or partnership are identified through conservation management planning, based on the *Open Standard for the Practice of Conservation or Conservation Standards*. We strive to achieve best practise where not only key staff but Traditional Owners, neighbours and relevant experts participate in the planning. In order to drive our science agenda, we developed this Knowledge Strategy guided by [Bush Heritage values and strategic goals](#). It identifies our key knowledge needs, whether to remove barriers to progress, or explore significant opportunities to improve our operations, reporting and long-term management across the country at the reserve, landscape and regional level. Bush Heritage will continue to build collaborative relationships with national leaders in ecology and environmental management to increase our science capacity and address knowledge needs. This Knowledge Strategy will be used both internally and externally to prioritise and take action to address the needs.

We value the work we do in partnership with Aboriginal landowners on Indigenous Protected Areas. The knowledge needs our partners have identified to manage their land into the future is recognised as their intellectual property. These knowledge needs are and will only be listed when our partners ask us to assist with finding additional researchers to support this work. Thus, the majority of the knowledge needs listed here relate to Bush Heritage owned properties.



Right-Way Science
(link to page)

Research Outputs
(link to page)

EOI for
students/collaborators

There are many avenues to collaborate with Bush Heritage. If you are a student please work with your supervisor to search through our Knowledge Strategy to find the greatest overlap between our knowledge need and your science interests. If you are an independent academic, please identify a research question to which you feel you could contribute and then use the EOI form below to start the conversation on how collaboration with Bush Heritage can work.

Schedule 1. Bush Heritage Identified Knowledge Needs.

The knowledge needs are detailed here as research and management questions and have been documented by staff responsible for reserve and partnership management during our regular conservation plan reviews. They have identified new knowledge needed to keep developing and applying strategies for efficient and targeted management of properties or landscapes. As such, this document will be constantly changing, remain active, and incorporate changing priorities and emerging opportunities and threats.

Reserve/Landscape	Landscape	Research Question	Research Theme	Priority
Bon Bon Station Reserve	L1.040: SA Arid Rangelands	What is the impact of historical water points in a de-stocked landscape? - Piosphere Analysis	R1.01: Reconnecting Landscapes	R3.02: Medium
Bon Bon Station Reserve	L1.040: SA Arid Rangelands	Is our trapping effort sufficient to monitor fauna assemblage?	R1.03: Protecting species in the landscape	R3.02: Medium
Bon Bon Station Reserve	L1.040: SA Arid Rangelands	What is the Sandalwood distribution, recruitment and health, and what are the limiting factors to recruitment?	R1.03: Protecting species in the landscape	R3.02: Medium
Bon Bon Station Reserve	L1.040: SA Arid Rangelands	What are the effects of white-fly on Myall?	R1.03: Protecting species in the landscape	R3.02: Medium
Bon Bon Station Reserve	L1.040: SA Arid Rangelands	What are the behaviour and physical traits of Hopping Mice on Bon Bon with low fox abundance?	R1.03: Protecting species in the landscape	R3.01: High
Bon Bon Station Reserve	L1.040: SA Arid Rangelands	Can eDNA be used to detect extant fauna from soil samples?	R1.03: Protecting species in the landscape	R3.02: Medium
Bon Bon Station Reserve	L1.040: SA Arid Rangelands	What is the distribution and habitat use characteristics of Chestnut-breasted Whiteface and Southern Whiteface?	R1.03: Protecting species in the landscape	R3.03: Low
Bon Bon Station Reserve	L1.040: SA Arid Rangelands	What is a tolerable level of a) foxes and b) cats that will allow the maintenance of a viable population of bettongs?	R1.03: Protecting species in the landscape, R1.04: Feral and overabundant native species	R3.01: High

Bon Bon Station Reserve	L1.040: SA Arid Rangelands	What's at stake if Buffel grass takes over Bon Bon?	R1.04: Feral and overabundant native species	R3.03: Low
Bon Bon Station Reserve	L1.040: SA Arid Rangelands	What are the impacts of fire and how did Buffel Grass respond on Mount Vivian?	R1.04: Feral and overabundant native species	R3.02: Medium
Bon Bon Station Reserve	L1.040: SA Arid Rangelands	Work with Traditional Owners to determine the appropriate traditional fire regimes for Bon Bon	R1.01: Reconnecting Landscapes, R1.02: Cultural values and knowledge	R3.01: High
Bon Bon Station Reserve	L1.040: SA Arid Rangelands	Research the importance of fire in Mulga	R1.03: Protecting species in the landscape	R3.01: High
Bon Bon Station Reserve	L1.040: SA Arid Rangelands	What is the historical fire record and how does it relate to mulga regeneration? What is the role of fire in the mulga community?	R1.03: Protecting species in the landscape	R3.01: High
Bon Bon Station Reserve	L1.040: SA Arid Rangelands	What are the faunal populations in long unburnt mulga woodlands, and how does this compare with neighbouring properties?	R1.01: Reconnecting Landscapes	R3.01: High
Bon Bon Station Reserve	L1.040: SA Arid Rangelands	Mycorrhizal fungi pre and post reintroduction of bettongs?	R1.03: Protecting species in the landscape	R3.01: High
Bon Bon Station Reserve	L1.040: SA Arid Rangelands	Are family/social groups important in post-release survival of bettongs outside the fence?	R1.03: Protecting species in the landscape	R3.03: Low
Boolcoomatta Reserve	L1.040: SA Arid Rangelands	Undertake regional inventory of characteristic fauna species	R1.03: Protecting species in the landscape	R3.03: Low
Boolcoomatta Reserve	L1.040: SA Arid Rangelands	What is the value of refugia on Boolcoomatta?	R1.01: Reconnecting Landscapes, R1.03: Protecting species in the landscape	R3.02: Medium

Boolcoommatta Reserve	L1.040: SA Arid Rangelands	What is the relationship between Mulga recruitment and rabbits and goats? In particular, what impact are rabbits and goats having on Mulga recruitment, and what management actions could reduce these impacts?	R1.03: Protecting species in the landscape, R1.04: Feral and overabundant native species	R3.03: Low
Boolcoommatta Reserve	L1.040: SA Arid Rangelands	What impacts will climate change have on plant diversity and species health? Which species will respond better and survive? Will the current ecosystems be replaced by more heat tolerant species assemblages? Will revegetation work be able to use local provenance for resilient species or need to seek provenance from climate analogue sites? Which locations on Boolcoommatta are likely to act as refugia as temperatures rise and rainfall diminishes?	R1.03: Protecting species in the landscape	R3.01: High
Boolcoommatta Reserve	L1.040: SA Arid Rangelands	What is the population dynamics of Mitchell grass and what are the critical pressures reducing its survivorship? Can the use of portable exclosure be used over short periods at the critical time to help the Mitchell grass set seed? Will this be effective in increasing the seed stock in the soil? Is there a minimum age at which the grass is less attractive to grazers?	R1.03: Protecting species in the landscape	R3.01: High
Boolcoommatta Reserve	L1.040: SA Arid Rangelands	What techniques could be trialled to develop a protocol for successful revegetation of the rocky hills on Boolcoommatta?	R1.01: Reconnecting Landscapes	R3.01: High
Boolcoommatta Reserve	L1.040: SA Arid Rangelands	Can brushtail possums survive in the Oonartra Creek and be successfully reintroduced to the Olary Ranges?	R1.02: Cultural values and knowledge, R1.03: Protecting species in the landscape	R3.02: Medium
Boolcoommatta Reserve	L1.040: SA Arid Rangelands	Can UAV be used to monitor erosion gullies?	R1.07: Other	R3.03: Low
Boolcoommatta Reserve	L1.040: SA Arid Rangelands	Which technologies and/or baiting methods are the most efficient in controlling feral predators (eg. collar foxes, accelerometer)?	R1.04: Feral and overabundant native species	R3.03: Low

Boolcoomatta Reserve	L1.040: SA Arid Rangelands	What are public perceptions around kangaroo management?	R1.04: Feral and overabundant native species	R3.01: High
Boolcoomatta Reserve	L1.040: SA Arid Rangelands	What new technological and other innovations can support better management and monitoring of kangaroo populations at Boolcoomatta and reduce their grazing, trampling and social impact.	R1.04: Feral and overabundant native species	R3.01: High
Boolcoomatta Reserve	L1.040: SA Arid Rangelands	What impacts do kangaroos have on dryland ecosystems when they are overabundant?	R1.04: Feral and overabundant native species	R3.01: High
Boolcoomatta Reserve	L1.040: SA Arid Rangelands	What are the drivers behind changes in avifauna abundance and persistence on Boolcoomatta?	R1.03: Protecting species in the landscape	R3.02: Medium
Carnarvon Station Reserve	L2.040: Brigalow	Describe the ecology of the dingo on Carnarvon and surrounds	R1.03: Protecting species in the landscape	R3.03: Low
Carnarvon Station Reserve	L2.040: Brigalow	What are the causes of the absence / low abundance of macropods across Carnarvon Station Reserve? Are there any management actions that may help to boost numbers (e.g. predator control, translocation, mineral supplements)?	R1.03: Protecting species in the landscape	R3.03: Low
Carnarvon Station Reserve	L2.040: Brigalow	Literature review of tree hollows benchmark and/or indicators.	R1.01: Reconnecting Landscapes, R1.03: Protecting species in the landscape	R3.02: Medium
Carnarvon Station Reserve	L2.040: Brigalow	What are the effects on terrestrial vertebrate assemblages of the different broad-scale land uses on and around Carnarvon Station Reserve?	R1.01: Reconnecting Landscapes	R3.01: High
Carnarvon Station Reserve	L2.040: Brigalow	Can small-scale pulse grazing (using a novel cattle control method of virtual fencing) be an effective management tool in reducing the threat of fire in fire sensitive plant communities?	R1.01: Reconnecting Landscapes	R3.01: High

Carnarvon Station Reserve	L2.040: Brigalow	How can we optimise fire management on Carnarvon to improve the biodiversity of plant communities?	R1.01: Reconnecting Landscapes	R3.01: High
Dalyenong Reserves	L3.030: Riverina Goldfields	What are the ecological outcomes of undertaking small scale burns at Summerhayes Reserve?	R1.01: Reconnecting Landscapes, R1.02: Cultural values and knowledge, R1.03: Protecting species in the landscape	R3.01: High
East Coast Tasmania	L3.070: South-East Ungrouped	What are the impacts of fire on the health of the heathlands at Friendly Beaches?	R1.01: Reconnecting Landscapes	R3.01: High
Edgbaston	L2.060: Mitchell Grass Downs	Identify and prioritise potential research projects based on knowledge gaps identified in this plan	R1.01: Reconnecting Landscapes	
Edgbaston	L2.060: Mitchell Grass Downs	Conservation of the biodiverse Edgbaston Spring complexes; Understanding and highlighting the physiological adaptations of endemic fauna to extreme	R1.03: Protecting species in the landscape	R3.01: High
Edgbaston	L2.060: Mitchell Grass Downs	Spring Biota Dispersal Study: Consequences of Barrier Fencing	R1.03: Protecting species in the landscape	R3.02: Medium
Edgbaston	L2.060: Mitchell Grass Downs	Understanding and monitoring the genetics of red-finned blue-eye and Edgbaston goby	R1.03: Protecting species in the landscape	R3.01: High
Edgbaston	L2.060: Mitchell Grass Downs	What is the spatial and temporal scale of connectivity within individual species across local spring groups (hundreds of meters) and between broader spring groups (kilometre scale).	R1.03: Protecting species in the landscape	R3.02: Medium
Edgbaston	L2.060: Mitchell Grass Downs	What are the runoff patterns due to topography that determine the connectivity of species across the spring complex?	R1.01: Reconnecting Landscapes, R1.03: Protecting species in the landscape	R3.01: High
Edgbaston	L2.060: Mitchell Grass Downs	Is there a relationship between the observed patterns in genetic variability in spring biota at Edgbaston and those predicted from runoff patterns / topography?	R1.01: Reconnecting Landscapes, R1.03: Protecting species in the landscape	R3.01: High

Edgbaston	L2.060: Mitchell Grass Downs	What are the consequences of disrupting natural fish dispersal into the future, and what would be the impacts of artificially manipulating dispersal patterns to achieve various dispersal scenarios?	R1.01: Reconnecting Landscapes	R3.02: Medium
Edgbaston	L2.060: Mitchell Grass Downs	What is the red-finned blue-eye genetic diversity with respect to replicating and conserving this genetic diversity in the translocated and captive populations?	R1.03: Protecting species in the landscape	R3.02: Medium
Edgbaston	L2.060: Mitchell Grass Downs	Trojan Y technology - Gambusia control	R1.04: Feral and overabundant native species	R3.02: Medium
Ethabuka Reserve	L2.050: Mulligan	How do we most effectively suppress the impact of cats?	R1.04: Feral and overabundant native species	R3.01: High
Mulligan Priority Landscape	L2.050: Mulligan	What is the most beneficial fire regime to minimise wildfire and maximise the resilience, diversity and health of the spinifex	R1.01: Reconnecting Landscapes, R1.02: Cultural values and knowledge	R3.02: Medium
Ethabuka Reserve	L2.050: Mulligan	How do we emphasise the presence of the dingo – virtual or encourage presence of dingoes?	R1.03: Protecting species in the landscape	R3.02: Medium
Ethabuka Reserve	L2.050: Mulligan	What are the likely climate change impacts?	R1.01: Reconnecting Landscapes, R1.07: Other	R3.01: High
Ethabuka Reserve	L2.050: Mulligan	What are the biodiversity values of the Mulligan floodplains and how should these systems be most effectively managed?	R1.01: Reconnecting Landscapes	R3.01: High
Eurardy Reserve	L1.010: Mid-west WA	Are threatened orchids declining at Eurardy due to climate change?	R1.03: Protecting species in the landscape	R3.02: Medium
Eurardy Reserve	L1.010: Mid-west WA	What is the impact of feral predator control on Malleefowl activity?	R1.03: Protecting species in the landscape, R1.04: Feral and overabundant native species	R3.02: Medium

Eurardy Reserve	L1.010: Mid-west WA	Does the season of prescribed burns impact on plant community resilience?	R1.01: Reconnecting Landscapes, R1.02: Cultural values and knowledge	R3.02: Medium
Fitz-Stirling (BHA Partnership)	L1.030: South West WA	Pursue a research project to establish fire ages of Mallet and Moort patches and examine seed production, tree growth rates and longevity	R1.01: Reconnecting Landscapes	R3.03: Low
Fitz-Stirling (BHA Partnership)	L1.030: South West WA	Pursue a research project to confirm the relationship of Tammar with Mallet and Moort woodland.	R1.01: Reconnecting Landscapes, R1.03: Protecting species in the landscape	R3.03: Low
Fitz-Stirling (BHA Partnership)	L1.030: South West WA	How do we best establish the understory of regenerated lands in Fitz-Stirling?	R1.01: Reconnecting Landscapes	R3.03: Low
Fitz-Stirling (BHA Partnership)	L1.030: South West WA	What is the soil microbial diversity in the Fitz-Stirling and is this influencing restoration?	R1.01: Reconnecting Landscapes, R1.07: Other	R3.03: Low
Hamelin Station Reserve	L1.010: Mid-west WA	Can soil carbon be measured consistently?	R1.07: Other	R3.02: Medium
Hamelin Station Reserve	L1.010: Mid-west WA	Which revegetation/restoration/regeneration methods would sequester more carbon over time?	R1.01: Reconnecting Landscapes, R1.07: Other	R3.02: Medium
Hamelin Station Reserve	L1.010: Mid-west WA	Does destocking alone allow for regeneration of perennial native grass, and annual natives. Reintroduction of perennial grasses at Hamelin at scale.	R1.01: Reconnecting Landscapes	R3.01: High
Hamelin Station Reserve	L1.010: Mid-west WA	What is the impact and value of various land management actions on coastal systems?	R1.07: Other	R3.03: Low
Hamelin Station Reserve	L1.010: Mid-west WA	What are the key threats to Western Grasswrens?	R1.03: Protecting species in the landscape	R3.01: High
Hamelin Station Reserve	L1.010: Mid-west WA	Can we artificially replicate the 'landscape of fear' historically generated across the landscape by the presence of healthy populations of dingoes?	R1.01: Reconnecting Landscapes, R1.03: Protecting species in the landscape	R3.03: Low

Hamelin Station Reserve	L1.010: Mid-west WA	Determine the biology and ecology of the Hamelin Skink.	R1.03: Protecting species in the landscape	R3.01: High
Hamelin Station Reserve	L1.010: Mid-west WA	What is the most beneficial fire regime to maximize the resilience, diversity and health of Hamelin reserve?	R1.07: Other	R3.02: Medium
Hamelin Station Reserve	L1.010: Mid-west WA	Right-Way Fire Burning regime reworded as: Work with Traditional Owners to determine the appropriate traditional fire regimes for Hamelin	R1.01: Reconnecting Landscapes, R1.02: Cultural values and knowledge	R3.02: Medium
Hamelin Station Reserve	L1.010: Mid-west WA	What are the impacts of fire on Hamelin Skink and Grasswren?	R1.03: Protecting species in the landscape	R3.01: High
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	Research the pollen vectors and mycorrhizal associations of the key threatened orchid species	R1.03: Protecting species in the landscape	R3.01: High
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	Research the underlying causes of decline in the local populations of threatened ground-dwelling fauna	R1.03: Protecting species in the landscape	R3.02: Medium
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	What is the relationship between foxes, cats and rabbits and the influence of climate on these relationships	R1.04: Feral and overabundant native species	R3.02: Medium
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	Assess whether the density of tree hollows is limiting the populations of key species and examine solutions for the short- to long-term.	R1.03: Protecting species in the landscape	R3.02: Medium
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	What is the relative impact, if any, of feral predators, rabbits, ground disturbance (including collection of firewood) and food availability on threatened ground-dwelling fauna?	R1.01: Reconnecting Landscapes, R1.04: Feral and overabundant native species	R3.02: Medium
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	What is the current distribution, diversity and abundance of arboreal and Critical Weight Range mammals (gliders, possums, bats) in central Victoria, and how will these species be affected with the increasing impacts of climate change?	R1.03: Protecting species in the landscape	R3.02: Medium

Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	How will the climate envelop of these mammals and reptiles (both common and threatened) be transformed by climate change? Will the KKW area remain viable habitat under a range of emissions scenarios and time frames? Which species from more arid areas could be used to replace existing species to maintain ecosystem function? Is there adequate remnant vegetation that is connected to provide corridors for species to move to KKW?	R1.01: Reconnecting Landscapes	R3.01: High
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	What are the distribution, diversity and abundance of reptile species in the Kara Kara Wedderburn area? Do key species such as the Woodland blind snake have healthy or declining populations?	R1.03: Protecting species in the landscape	R3.02: Medium
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	Is there a presence of Phytophthora cinnamomic in the KKW landscape and what prevention measures for its spread should be put into place.	R1.04: Feral and overabundant native species	R3.01: High
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	What is the impact of cultural burn regimes on the production of introduced food and fibre plants such as high yielding native orchids, Myrrnong and native grasses.	R1.02: Cultural values and knowledge	R3.01: High
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	What is the diversity and abundance of and how do we ensure the viability of native bee populations?	R1.03: Protecting species in the landscape	R3.02: Medium
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	Is there a significant decline in temperate woodland birds in the KKW, if so what species are most at risk, what geographic gaps are occurring in the landscape and what measures should be taken to increase available resources?	R1.03: Protecting species in the landscape	R3.02: Medium
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	What is the current health of KKW grassy woodlands and heathy woodland ecosystems, what is an appropriate method for assessing ecosystem health?	R1.01: Reconnecting Landscapes	R3.02: Medium

Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	What hollow dependant fauna is present on the Victotian reserves (to include hollow suitability assessments)?	R1.03: Protecting species in the landscape	R3.02: Medium
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	What is the current distribution of high threat and emerging weeds on KKW reserves?	R1.04: Feral and overabundant native species	R3.03: Low
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	How do we more effectively manage existing high-threat weeds, such as Bridal Creeper, Wheel Cactus and Paterson’s Curse, and prevent new high-threat weeds from establishing in the region?	R1.04: Feral and overabundant native species	R3.02: Medium
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	What are the new and potential emerging, high threat weed species entering the landscape in a changing climate? What strategies can be established to prevent establishment.	R1.04: Feral and overabundant native species	R3.02: Medium
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	What new technologies or strategies could be deployed to help achieve and maintain sustainable Kangaroo populations in the central Victorian agricultural landscape?	R1.04: Feral and overabundant native species	R3.01: High
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	What strategies can be put into place to include indigenous cultural practices in macropod management?	R1.02: Cultural values and knowledge	R3.01: High
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	What is the mean distance of pollen dispersal for Eucalyptus microcarpa and E. melliodora across the KKW landscape?	R1.01: Reconnecting Landscapes R1.03: Protecting species in the landscape	R3.01: High
Kara Kara Wedderburn landscape	L3.030: Riverina Goldfields	What are the physiological indicators and aftermath of climate stress on Eucalyptus microcarpa , E. melliodora and E. macrorhyncha within the KKW landscape?	R1.01: Reconnecting Landscapes	R3.01: High
Kara Kara Wedderburn	L3.030: Riverina Goldfields	Is there a significant decline in temperate woodland birds in the KKW, if so what species are most at risk,	R1.03: Protecting species in the landscape	R3.01: High

landscape		what geographic gaps are occurring in the landscape and what measures should be taken to increase available resources?		
Kojonup Reserve	L1.030: South West WA	What is the most beneficial fire regime to maximize the resilience, diversity and health of Kojonup reserve?	R1.01: Reconnecting Landscapes, R1.07: Other	R3.02: Medium
Mid-west WA Priority Landscape	L1.010: Mid-west WA	What is the cultural significance of hemiparasitic (Santalum) species in the southern rangelands of WA?	R1.02: Cultural values and knowledge	R3.02: Medium
Mid-west WA Priority Landscape	L1.010: Mid-west WA	What are the native and feral predator /prey relationships that are ecologically significant on Mid-West properties? How can understanding these relationships drive efficiencies in the management of feral predator populations?	R1.03: Protecting species in the landscape, R1.04: Feral and overabundant native species	R3.01: High
Mid-west WA Priority Landscape	L1.010: Mid-west WA	Are trapdoor spiders in decline in remnant woodlands in the transition zone of WA?	R1.03: Protecting species in the landscape	R3.03: Low
Mid-west WA Priority Landscape	L1.010: Mid-west WA	Are treecreepers an effective indicator of woodland health for our West Australian reserves?	R1.01: Reconnecting Landscapes	R3.03: Low
Mulligan Priority Landscape	L2.050: Mulligan	What is the effect of different landscape scale fire age and frequency patterns on biodiversity conservation in the Mulligan landscapes?	R1.01: Reconnecting Landscapes	R3.02: Medium
Mulligan Priority Landscape	L2.050: Mulligan	How do we most effectively suppress feral predators in the Simpson Desert landscape to promote landscape scale biodiversity conservation?	R1.04: Feral and overabundant native species	R3.01: High
Mulligan Priority Landscape	L2.050: Mulligan	How to effectively survey and monitor birds, potentially using citizen scientists, to track changes in arid systems?	R1.03: Protecting species in the landscape	R3.01: High
Nardoo Hills Reserves and Surrounds	L3.030: Riverina Goldfields	What is the current and predicted impact on the hollow dependant fauna with the current and modelled decline in canopy cover at Nardoo Hills reserve?	R1.03: Protecting species in the landscape	R3.02: Medium

Nardoo Hills Reserves and Surrounds	L3.030: Riverina Goldfields	Is flowering and nectar production at Nardoo Hills and Lawan reserve sufficient to support populations of native bees and Honey eaters and is there a direct impact due to feral bee populations.	R1.03: Protecting species in the landscape	R3.02: Medium
Nardoo Hills Reserves and Surrounds	L3.030: Riverina Goldfields	What is the current hydrology of Nardoo Hills reserve and what management interventions are required to eliminate active erosion?	R1.01: Reconnecting Landscapes	R3.02: Medium
Nardoo Hills Reserves and Surrounds	L3.030: Riverina Goldfields	Can thinning dense tree regrowth contribute to improved and accelerated biodiversity values in Grassy woodland ecosystems?	R1.01: Reconnecting Landscapes	R3.02: Medium
Nardoo Hills Reserves and Surrounds	L3.030: Riverina Goldfields	Determine the pollinator species for each of the threatened orchids on Nardoo Hills	R1.03: Protecting species in the landscape	R3.02: Medium
Nardoo Hills Reserves and Surrounds	L3.030: Riverina Goldfields	Investigate the effects of Climate Change on key species or ecological processes.	R1.03: Protecting species in the landscape	R3.01: High
Naree and Yantabulla Reserves	L3.010: Paroo Warrego	What is the hydrology of the Cuttaburra creek and its catchment?	R1.01: Reconnecting Landscapes, R1.02: Cultural values and knowledge	R3.01: High
Naree and Yantabulla Reserves	L3.010: Paroo Warrego	Where are the potential refugia on Naree and what is the role of each refugia for species during the cycles of boom and bust?	R1.01: Reconnecting Landscapes	R3.01: High
Naree and Yantabulla Reserves	L3.010: Paroo Warrego	What is the baseline condition of Naree's key conservation targets and what important species assemblages or species occur in each?	R1.02: Cultural values and knowledge, R1.03: Protecting species in the landscape	R3.01: High
Naree and Yantabulla Reserves	L3.010: Paroo Warrego	What is the best way to monitor the key conservation targets that is achievable and sustainable?	R1.07: Other	R3.01: High
Pullen Pullen	L2.060: Mitchell Grass Downs	What are the options for extreme event rescue, captive breeding and release of Night Parrots?	R1.03: Protecting species in the landscape	R3.02: Medium

Pullen Pullen	L2.060: Mitchell Grass Downs	What are the impacts on Night Parrot breeding success and population persistence of different land management approaches: stock grazing vs destocking?	R1.03: Protecting species in the landscape	R3.02: Medium
Pullen Pullen	L2.060: Mitchell Grass Downs	What are the movement/dispersal patterns and genetic variability of Night Parrots, and does this help us to understand their national distribution and likely total population numbers?	R1.03: Protecting species in the landscape	R3.01: High
Pullen Pullen	L2.060: Mitchell Grass Downs	Improving monitoring methods and call recognition for Night Parrots and Plains Wanderers at Pullen Pullen.	R1.03: Protecting species in the landscape	R3.01: High
Pullen Pullen	L2.060: Mitchell Grass Downs	What are the most effective ways to monitor species, community and ecosystem condition at Pullen Pullen, and how do we benchmark condition of these assets?	R1.01: Reconnecting Landscapes, R1.07: Other	R3.02: Medium
Pullen Pullen	L2.060: Mitchell Grass Downs	How do we most effectively suppress feral predators at Pullen Pullen to promote landscape scale biodiversity conservation?	R1.04: Feral and overabundant native species	R3.02: Medium
SA Arid Rangelands Priority Landscape	L1.040: SA Arid Rangelands	Can conservation reserves provide a barrier to disease transmission in pastoral regions?	R1.07: Other	R3.03: Low
SA Arid Rangelands Priority Landscape	L1.040: SA Arid Rangelands	What are the benefits of conservation reserves in the SA arid rangelands?	R1.07: Other	R3.02: Medium
Science and Conservation Team	L4.010: National Ungrouped	What are the impacts of fire management across all Bush Heritage priority landscapes and properties? Have we conducted cool burns? Are these cool burns informed by cultural knowledge? Have they had the impact of reducing major burns across our reserves?	R1.01: Reconnecting Landscapes	R3.02: Medium
Science and Conservation Team	L4.010: National Ungrouped	What are the policy levers that would be most effective in influencing conservation?	R1.07: Other	R3.02: Medium

Science and Conservation Team	L4.010: National Ungrouped	What are the opportunities and threats inherent in current national and state-based water policy? How do we address policy failures and drive and influence policy reform?	R1.07: Other	R3.01: High
Science and Conservation Team	L4.010: National Ungrouped	Is there a measurable difference in the condition of soils, vegetation or species populations as a result of our management?	R1.01: Reconnecting Landscapes, R1.02: Cultural values and knowledge, R1.03: Protecting species in the landscape, R1.04: Feral and overabundant native species	R3.01: High
Science and Conservation Team	L4.010: National Ungrouped	How do we best measure ecosystem function into the future?	R1.01: Reconnecting Landscapes, R1.02: Cultural values and knowledge	R3.03: Low
Science and Conservation Team	L4.010: National Ungrouped	What would the likely outcomes have been for Bush Heritage properties, had we not bought and protected or regenerated key conservation targets?	R1.07: Other	R3.02: Medium
Scottsdale Reserve	L3.040: South East NSW	Vipers - Trial effectiveness of biocontrol	R1.04: Feral and overabundant native species	R3.02: Medium
Scottsdale Reserve	L3.040: South East NSW	Trial of drones for monitoring introduced or overabundant native fauna including deer, pigs, kangaroos e.g. infra-red sensors	R1.04: Feral and overabundant native species, R1.07: Other	R3.02: Medium
Scottsdale Reserve	L3.040: South East NSW	Improved understanding of impacts of Gambusia on Mountain Galaxias	R1.04: Feral and overabundant native species	R3.02: Medium
Scottsdale Reserve	L3.040: South East NSW	Determine cause of Tree die-back	R1.01: Reconnecting Landscapes	R3.03: Low
Scottsdale Reserve	L3.040: South East NSW	Hydrology - Better understanding flows related to river health and management	R1.01: Reconnecting Landscapes	R3.02: Medium

Scottsdale Reserve	L3.040: South East NSW	Characteristic flora species - Methods for increasing diversity of groundcover species in grassy systems in revegetation areas	R1.01: Reconnecting Landscapes	R3.02: Medium
Scottsdale Reserve	L3.040: South East NSW	Characteristic flora species - Methods for increasing dispersal of species from grassland seed orchards	R1.01: Reconnecting Landscapes	R3.02: Medium
Scottsdale Reserve	L3.040: South East NSW	Characteristic flora species - Methods for increasing productivity and resilience of grassland seed orchards	R1.01: Reconnecting Landscapes	R3.02: Medium
Scottsdale Reserve	L3.040: South East NSW	Characteristic flora species - Improved understanding of reintroduction techniques of Button Wrinklewort e.g. direct seeding, soil types	R1.03: Protecting species in the landscape	R3.02: Medium
Scottsdale Reserve	L3.040: South East NSW	Characteristic flora species - eDNA testing to determine cryptic fauna assemblage	R1.03: Protecting species in the landscape, R1.07: Other	R3.02: Medium
Scottsdale Reserve	L3.040: South East NSW	Soil - Increased understanding of soil mycorrhizal assemblage to improve revegetation outcomes	R1.01: Reconnecting Landscapes	R3.02: Medium
Scottsdale Reserve	L3.040: South East NSW	Characteristic fauna species - Improved understanding of declining woodland bird populations on Scottsdale	R3.02: Medium	
Scottsdale Reserve	L3.040: South East NSW	Characteristic flora species - Population dynamics of Eucalyptus pulverulenta (vulnerable species)	R1.03: Protecting species in the landscape	R3.02: Medium
Scottsdale Reserve	L3.040: South East NSW	Trial of carp control techniques	R1.04: Feral and overabundant native species	R3.02: Medium
Scottsdale Reserve	L3.040: South East NSW	Are there additional biological control agents that can be used to contain/control the key weed species (African lovegrass, Serrated Tussock, Horehound etc) and so reduce herbicide use?	R1.04: Feral and overabundant native species	R3.02: Medium

Scottsdale Reserve	L3.040: South East NSW	African Love Grass - Trial of alternative herbicide treatments	R1.04: Feral and overabundant native species	R3.02: Medium
Scottsdale Reserve	L3.040: South East NSW	African Love Grass - Impact of ALG herbicide treatments on C3 native grasses e.g. adult plant mortality and seed germination	R1.01: Reconnecting Landscapes, R1.04: Feral and overabundant native species	R3.02: Medium
Scottsdale Reserve	L3.040: South East NSW	African Love Grass - Pre-treatment trials to reduce nutrient flush/thatch/herbicide rates	R1.04: Feral and overabundant native species	R3.02: Medium
Scottsdale Reserve	L3.040: South East NSW	African Love Grass - New techniques for mapping weed control outcomes e.g. change in cover (species specific) using drones	R1.03: Protecting species in the landscape, R1.04: Feral and overabundant native species, R1.07: Other	R3.02: Medium
Scottsdale Reserve	L3.040: South East NSW	African Love Grass - Impact of herbicide control on native and introduced fauna e.g. reptiles, habitat structure, predator responses	R1.03: Protecting species in the landscape, R1.04: Feral and overabundant native species	R3.01: High
Scottsdale Reserve	L3.040: South East NSW	St Johns Wort - Trial of techniques and/or alternative herbicides for control in herb-rich ecosystems	R1.04: Feral and overabundant native species	R3.02: Medium
Scottsdale Reserve	L3.040: South East NSW	Are there effective, humane approach(es) to controlling the macropod population in agricultural landscapes of SE Australia?	R1.04: Feral and overabundant native species	R3.01: High
Scottsdale Reserve	L3.040: South East NSW	Trial of new humane control techniques - fertility control methods - which species?	R1.04: Feral and overabundant native species	R3.02: Medium
Scottsdale Reserve	L3.040: South East NSW	What is the most beneficial fire regime to maximise the resilience, diversity and health of Scottsdale?	R1.01: Reconnecting Landscapes, R1.02: Cultural values and knowledge, R1.07: Other	R3.02: Medium
Tarcutta Hills Reserve	L3.040: South East NSW	What is the consequence for large scale clearing and woody debris removal on understorey and overstorey growth	R1.01: Reconnecting Landscapes	R3.02: Medium
Tarcutta Hills Reserve	L3.040: South East NSW	Identify fire regime knowledge gaps, including cultural burning knowledge	R1.02: Cultural values and knowledge, R1.07: Other	R3.01: High

Tarcutta Hills Reserve	L3.040: South East NSW	What is the most beneficial fire regime to maximize the resilience, diversity and health of Tarcutta Hills	R1.01: Reconnecting Landscapes, R1.02: Cultural values and knowledge, R1.07: Other	R3.02: Medium
Tarcutta Hills Reserve	L3.040: South East NSW	What methods can be used to reduce the cover of Cape weed across the northern disturbed sections of Tarcutta	R1.04: Feral and overabundant native species	R3.02: Medium
Tarcutta Hills Reserve	L3.040: South East NSW	Research history of previous management of paddocks	R1.01: Reconnecting Landscapes	R3.02: Medium
Tasmanian MidLandscapes Project	L3.060: Tasmanian Midlands	What effect is the decline of the Tasmanian Devil having on feral cat populations in the Tasmanian Midlands and flow on impacts on Critical Weight Range species that are extinct on the Mainland?	R1.03: Protecting species in the landscape	R3.01: High
Tasmanian MidLandscapes Project	L3.060: Tasmanian Midlands	What is the interaction between Eastern Barred Bandicoots, cats and ground cover/fallen timber?	R1.03: Protecting species in the landscape	R3.02: Medium
Tasmanian MidLandscapes Project	L3.060: Tasmanian Midlands	Which are the species of high cultural value in the Midlands? Are they significant as Critical Weight Range mammals or threatened species?	R1.02: Cultural values and knowledge, R1.03: Protecting species in the landscape	R3.02: Medium
Tasmanian MidLandscapes Project	L3.060: Tasmanian Midlands	Can we improve the condition of native grasslands through improved control of naturalised grass weeds such as Anthoxanthum, Holcus and Agrostis species?	R1.03: Protecting species in the landscape	R3.01: High
Tasmanian MidLandscapes Project	L3.060: Tasmanian Midlands	Can fire be re-introduced to the grassy woodlands and grasslands to improve species richness and improve vegetation structure? How significant is the impact of native herbivores and feral herbivores on the vegetation response to fire?	R1.02: Cultural values and knowledge, R1.03: Protecting species in the landscape, R1.04: Feral and overabundant native species	R3.02: Medium
Yourka Reserve	L2.080: Einasleigh Uplands	What is Yourkas capacity for species reintroductions? (Species for investigation include Northern Quoll, Northern Bettong, Black-footed Tree Rat, Black-throated Finch).	R1.03: Protecting species in the landscape	R3.02: Medium

Yourka Reserve	L2.080: Einasleigh Uplands	What is the distribution and abundance of Critical Weight Range Mammals on Yourka?	R1.03: Protecting species in the landscape	R3.01: High
Yourka Reserve	L2.080: Einasleigh Uplands	What is the impact of Noisy Miners on small, woodland birds and ecosystem function?	R1.04: Feral and overabundant native species	R3.01: High
Yourka Reserve	L2.080: Einasleigh Uplands	What is the best way to monitor these key conservation targets that is achievable and sustainable?	R1.01: Reconnecting Landscapes, R1.03: Protecting species in the landscape	R3.01: High
Yourka Reserve	L2.080: Einasleigh Uplands	What are the impacts on fire on vegetation and birds at Yourka, and what are the positive and perverse effects of the current regimes on small bodied birds and noisy miners?	R1.01: Reconnecting Landscapes, R1.03: Protecting species in the landscape	R3.01: High
Yourka Reserve	L2.080: Einasleigh Uplands	What are the most effective ways to monitor species, community and ecosystem condition at Yourka, and how do we benchmark condition of these assets?	R1.01: Reconnecting Landscapes	R3.02: Medium
Yourka Reserve	L2.080: Einasleigh Uplands	What are the impacts of feral and native predators on the mammals at Yourka, and what strategies and methods should be used to monitor native mammal populations and feral predator control?	R1.03: Protecting species in the landscape	R3.02: Medium