



SAVING OUR SPECIES

White Box Yellow Box Blakely’s Red Gum Woodland

2022-2023 annual report card

Summary

Management sites	Bungendore Region Travelling Stock Routes; Cowra Enhancement; Cowra Maintenance; Cowra Revegetation; Dananbilla - Illunie area; Googong-Burra Region; South West Slopes; Southern Reserves; Tarcutta Hills
Action implementation	14 (of 14) management actions were fully or partially implemented as planned for the financial year.
Total expenditure	\$151,124 (\$119,801 cash; \$31,323 in-kind)
Partners	Bush Heritage Australia; Environment and Heritage Group; GrassRoots Environmental; Mid Lachlan Landcare; Molonglo Catchment Group; Molonglo Conservation Group; Peet Limited; South East Local Land Services



Name:

White Box - Yellow Box - Blakely’s Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions

NSW status:

Critically Endangered Ecological Community

Commonwealth status:

Not listed Photo: Susan Jackson

Management stream:

Ecological community (widespread)

Priority management site: Bungendore Region Travelling Stock Routes

Local government area:

Queanbeyan-Palerang Regional

Partners:

Environment and Heritage Group; GrassRoots Environmental; Molonglo Catchment Group; Molonglo Conservation Group

Ecological community outcome

- On track
- On track (inferred)
- Not on track (inferred)
- Not on track

Monitoring

Ecological community viability monitoring by one or more methods indicates response to management over time and provides an outcome measure.

Monitoring metric	Habitat condition
Annual target	Maintain or improve native vegetation cover and diversity.
Long term target	Native groundcover maintained or improved on 100% of management units within sites. Floristic diversity is maintained or improved on 100% of management units within sites. Tree recruitment increase on 5% of rapid BAM plots.
Monitoring result	Floristic diversity increased across all BAM sites.
Scientific rigour of monitoring method	High
Conducted by	GrassRoots Environmental; Molonglo Conservation Group

Investment

Participant	Cash	In-kind
Environment and Heritage Group	\$14,258	\$0
Molonglo Catchment Group	\$0	\$86
Molonglo Conservation Group	\$0	\$1,855

Management actions

The following actions are those identified as being required in financial year 2022-2023 to maximise the viability of the ecological community.

Threat	Management action	Implemented as planned?
Degradation by over grazing and trampling by domestic stock resulting in losses of plant species and structural diversity (simplification of the understorey and groundlayer and suppression of overstorey regeneration), erosion and other soil changes (e.g. loss of cryptogams, increased nutrient status).	Maintain established exclosures and fencing.	Yes
Degradation of remnants by non-native plant species, including noxious weeds, exotic pasture species and environmental weeds, including garden escapes, olives and pines.	Maintain or reduce extent and abundance of invasive and exotic weeds.	Yes
Habitat loss, degradation and fragmentation from agricultural, forestry, mining, infrastructure and residential development.	Complete 14 Land for Wildlife assessment reports to increase stakeholder awareness of ecological values and threats. Conduct four workshop in collaboration with stakeholder group to increase project awareness. Create online material to engage local primary schools.	Yes
Harvesting of firewood (either living or standing dead, including material on the ground) and collection of on-ground woody debris.	Monitor photo points and record/report any disturbance to woody debris.	Yes
Removal of native ground layer in box-gum woodland remnants where trees have been partially or fully removed.	Maintain plantings of shrubs and trees designed to enhance missing structural elements across landscapes.	Yes

Threat outcome

Assessment on the status of critical threats at this site.

Threat	Annual target	Threat status
Removal of native ground layer in box-gum woodland remnants where trees have been partially or fully removed.	Ensure at least 80% survival of tube-stock plantings.	On track
Degradation by over grazing and trampling by domestic stock resulting in losses of plant species and structural diversity (simplification of the understorey and groundlayer and suppression of overstorey regeneration), erosion and other soil changes (e.g. loss of cryptogams, increased nutrient status).	Maintain 70% ground cover or better by reduced feral herbivore pressure.	On track
Degradation of remnants by non-native plant species, including noxious weeds, exotic pasture species and environmental weeds, including garden escapes, olives and pines.	Maintain or reduce cover of invasive and/or exotic weeds.	Not on track
Harvesting of firewood (either living or standing dead, including material on the ground) and collection of on-ground woody debris.	Maintain or reduce instances of firewood collection.	Not on track
Habitat loss, degradation and fragmentation from agricultural, forestry, mining, infrastructure and residential development.	Improve understanding of ecological threats and entities by community students and landholders.	On track

Site summary

In the Bungendore region, as with most of eastern Australia, grassy woodlands and their inhabitants are under threat. Fragmentation of habitat from land clearing and urbanisation, human intervention in woodland vegetational structural layers, introduced pests and weeds, and removal of habitat has put pressure on woodland ecosystems, particularly small woodland birds.

Year 5 of the Saving Our Species Bungendore Region Travelling Stock Routes project is now complete. This project aims to restore threatened grassy woodland ecological communities for woodland birds in the Bungendore Region in six chosen Travelling Stock Reserves (TSRs). Now largely vacant, TSRs are historic reserves drovers once used to move stock between towns. As such, many have become hotspots for biodiversity and a harbour for patches of remnant woodland as well as weeds and pests.

With much of the on-ground work completed earlier in the project, such as building 'stepping-stone' enclosures and planting otherwise under represented mid-story vegetation, the focus of the final funded year was to solidify a legacy that would carry the project beyond its funding period.

Keeping the local community engaged was a principal area of focus. Volunteers including students from the Canberra Institute of Technology, members of the Small Farms Network and members of Carwoola Landcare, were all engaged to help with the project. Conservation Ecosystem Management CIT students helped us remove over 350kg of rubbish and planted 100 native grasses to improve groundcover diversity in our target TSRs. The Small Farms Network and Carwoola Landcare partnered with us to present on woodland bird and grassy woodland habitat preservation and restoration workshops to their members and small landholders in the region. We leveraged the network's reach to expand the call for wildlife conservation activities, resulting in 13 new Land for Wildlife assessments and conservation agreements done on small farms in Bungendore and surrounds. To combat the turnover rate of small landholders within the region and ensure longevity of preservation, we also created a booklet illustrating the methods of habitat restoration accessible in print and online for future landholders.

The Wondrous Box-Gum Grassy Woodlands colouring-in book, created in 2022 in alignment with the Australian curriculum, was further aligned with the NSW curriculum, carrying on from last year's successful education campaign. We identified additional opportunities to work alongside the NSW Environment Trust's Landscape -Species conservation - *Aprasia parapulchella* habitat in the Googong-Burra Region project to develop a primary-aged children's book series and curriculum aligned teaching package called Luna the Stay-At-Home Cat. The Luna the Stay-At-Home Cat series is aimed at educating the community on cat containment in the Bungendore region and has been made available to schools in Bungendore and the surrounding areas.

Weed control was another focus this year. Four TSRs were treated for a variety of noxious weeds, including Serrated tussock, St John's wort, Blackberry and Patterson's curse. Funding was put toward developing an integrated pest management plan including the use of chemical and non-chemical control methods to reduce the amount of herbicide used in environmentally sensitive areas. Over 100ha were treated using a mix of chemical application, steam weeding and manual removal and disposal.

As part of our final monitoring phase, local ecologists were recruited to conduct monitoring in TSRs. Experts in botany and ornithology conducted our final Rapid Biodiversity Assessment Method (BAM) surveys on flora biodiversity and bird surveys in September with exciting results: Scarlet Robins were identified at two of the target TSR's, including a breeding pair using one of the projects planted 'stepping-stone' enclosures. Additional ad hoc surveys were then conducted in June, recording both Scarlet Robins and a Speckled Warbler. The long history of the project's dataset is of such significance, a local ecologist is undertaking data analysis toward a potential research paper. The paper, on the significance of reserves that contain natural grassland or grassland-woodland mosaic to native woodland bird species, is due to be released later in 2023 and will strengthen the project's legacy into the future.





The activities completed within the final year of funding, particularly the ongoing advocacy and creation of education materials, will contribute to the longevity of conservation of endangered woodland ecological communities for years to come.

Priority management site: Cowra Enhancement

Local government area:
Not specified

Partners:
Mid Lachlan Landcare

Ecological community outcome

-  On track
-  On track (inferred)
-  Not on track (inferred)
-  Not on track

The trend in viability is unknown at this time because the viability of the ecological community was not monitored and a critical threat was not monitored or managed this financial year.

Management actions

No management actions were planned at this site for the financial year.

Site summary





DRAFT

Priority management site: Cowra Maintenance

Local government area:
Cowra

Partners:
Mid Lachlan Landcare

Ecological community outcome

-  On track
-  On track (inferred)
-  Not on track (inferred)
-  Not on track

The trend in viability is unknown at this time because the viability of the ecological community was not monitored and a critical threat was not monitored or managed this financial year.

Management actions

No management actions were planned at this site for the financial year.

Site summary





DRAFT

Priority management site: Cowra Revegetation

Local government area:
Not specified

Partners:
Mid Lachlan Landcare

Ecological community outcome

-  On track
-  On track (inferred)
-  Not on track (inferred)
-  Not on track

The trend in viability is unknown at this time because the viability of the ecological community was not monitored and a critical threat was not monitored or managed this financial year.

Management actions

No management actions were planned at this site for the financial year.

Site summary





DRAFT

Priority management site: Dananbilla - Illunie area

Local government area:
Cowra; Hilltops; Weddin

Partners:
Environment and Heritage Group

Ecological community outcome

-  **On track**
-  **On track (inferred)**
-  **Not on track (inferred)**
-  **Not on track**

Monitoring

Ecological community viability monitoring by one or more methods indicates response to management over time and provides an outcome measure.

Monitoring metric	Habitat condition
Annual target	Habitat condition is maintained across sites.
Long term target	Maintain and enhance the diversity and condition of the TEC within the site.
Monitoring result	Recovery of groundlayer native species richness (from 12 to 31 spp) and abundance (from 123 to 370 plants) post drought. Bird data demonstrated x yz (when analysed). An additional 500 trees were planted. Previously planted trees have grown significantly in the last 3 years. More than 95% of priority weeds were prevented from seed set.
Scientific rigour of monitoring method	Moderate
Conducted by	Environment and Heritage Group

Investment

Participant	Cash	In-kind
Environment and Heritage Group	\$67,987	\$26,620

Management actions

The following actions are those identified as being required in financial year 2022-2023 to maximise the viability of the ecological community.

Threat	Management action	Implemented as planned?
Degradation by over grazing and trampling by feral herbivores resulting in losses of plant species and structural diversity (simplification of the understorey and groundlayer and suppression of overstorey regeneration), erosion and other soil changes (e.g. loss of cryptogams, increased nutrient status).	Undertake slashing to enable weed control and regeneration of native grasses.	Yes
Degradation by overabundant native herbivores resulting in losses of plant species and structural diversity (simplification of the understorey and groundlayer and suppression of overstorey regeneration), erosion and other soil changes (e.g. loss of cryptogams, increased nutrient status).	Maintain fence.	Yes
Degradation of remnants by non-native plant species, including noxious weeds, exotic pasture species and environmental weeds, including garden escapes, olives and pines.	Control priority infestations.	Yes
Habitat loss, degradation and fragmentation from agricultural, forestry, mining, infrastructure and residential development.	Treat vegetation regrowth to maintain heterogeneous habitat and ecosystem benchmarks.	Conducted, but not as planned - Additional NPWS funding was obtained to conduct regrowth management not programmed for this year.
Lack of community knowledge and appreciation of White Box Yellow Box Blakely's Red Gum Woodland and their component threatened species.	Liase with Young High School regarding incorporation of box-gum woodland into senior school studies.	Conducted, but not as planned - Formal liaison did not occur due to wet spring precluding access for school group. However, information on box-gum management was provided to students undertaking those courses.

Threat outcome

Assessment on the status of critical threats at this site.

Threat	Annual target	Threat status
Degradation by over grazing and trampling by feral herbivores resulting in losses of plant species and structural diversity (simplification of the understorey and groundlayer and suppression of overstorey regeneration), erosion and other soil changes (e.g. loss of cryptogams, increased nutrient status).	Number of warrens stable or declining.	On track
Degradation of remnants by non-native plant species, including noxious weeds, exotic pasture species and environmental weeds, including garden escapes, olives and pines.	>90% of plants prevented from seeding.	On track
Degradation by overabundant native herbivores resulting in losses of plant species and structural diversity (simplification of the understorey and groundlayer and suppression of overstorey regeneration), erosion and other soil changes (e.g. loss of cryptogams, increased nutrient status).	Subset of groundlayer transects monitored.	On track

Site summary

Priority management site: Googong-Burra Region

Local government area:

Queanbeyan-Palerang Regional; Snowy Monaro Regional

Partners:

Molonglo Conservation Group; Peet Limited

Ecological community outcome

- On track
- On track (inferred)
- Not on track (inferred)
- Not on track

The viability of the ecological community is inferred to be on track based on threat management being on track. The trend in viability is unknown at this time.

Monitoring

Ecological community viability monitoring by one or more methods indicates response to management over time and provides an outcome measure.

Ecological community monitoring was not conducted at this site this financial year - logistical delays.

Investment

Participant	Cash	In-kind
Molonglo Conservation Group	\$0	\$2,762
Peet Limited	\$20,846	\$0

Management actions

The following actions are those identified as being required in financial year 2022-2023 to maximise the viability of the ecological community.

Threat	Management action	Implemented as planned?
Habitat loss, degradation and fragmentation from agricultural, forestry, mining, infrastructure and residential development.	Build community support for species through strengthening online presence- increase social media campaign at least 200%. Produce podcast to promote activities. Produce NSW curriculum aligned resource for schools to educate about species using Googong as the focal site. Produce poster to display in site area to generate interest in project and species. Launch online cat containment resource.	Yes

Threat outcome

Assessment on the status of critical threats at this site.

Threat	Annual target	Threat status
Habitat loss, degradation and fragmentation from agricultural, forestry, mining, infrastructure and residential development.	Consult with 20 landholders about protection and/or restoration	Not assessed

Site summary

In the wake of COVID-19, we've shifted most proposed on-ground events and community engagement into the digital sphere as part of a contingency response plan. The benefit of having a stronger online presence is that there is a longevity to the resources developed and an increased audience reach. With an online presence, we have also been able to more efficiently collaborate and share resources with the community. While the Molonglo Conservation Group website is still under development, we have had great success expanding into new demographics through social media. We have continued to upload regular posts to social media including Facebook and Instagram to bring attention to White-Box, Yellow-Box, Blakely's Red Gum Grassy Woodlands and to celebrate the achievements of the project. In the 2022-2023 period the Molonglo Conservation Group reached a cumulative 18,951 individual reach on Facebook, and Instagram increased to 1,438 which is a 376.2% increase from the last financial year. This connectivity cannot be understated heading into the conclusion of the project, as there are now tangible resources available through online access to Googong and broader community to support ongoing conservation efforts.

In May 2023, 3 wildlife cameras were installed inside the Googong township SE sanctuary block and each camera recorded high fox presence. The cameras were installed at points of vulnerability in the boundary fence to determine if the foxes were accessing the site through these points, and we were able to determine that they were. This gives us insight into how to correct the fence and restrict access more efficiently. The timing of these cameras inside the site coincided with the Parks and Conservation Service scheduled aerial fox treatment. The cameras will be reinstalled after PCS concludes their treatment and repairs have been made to the fence. Our findings for fox presence in May act as a baseline for ongoing monitoring in the site, ideally the next time we install the cameras and review the data there will be a reduced amount or total absence of foxes inside the sanctuary. The site lessee has been contracted to implement ongoing fox treatment into his current control regime.

The apron of the boundary fence of the Googong township SE sanctuary block was pinned down in November 2022, significantly reducing points of vulnerability and animal access. The Conservation and Ecosystems Management class from Canberra Institute of Technology undertook this task, pinning 750 individual pins into the ground. Several turtles were also relocated, having become physically trapped in the fence apron. As aforementioned, there are still points in which need further pinning where predators have created access points.

In November 2022 just under 250 individual tube stock were planted on the Googong township SE sanctuary block, including *Themeda triandra*, *Leucochrysum albicans*, *Xerochrysum viscosum* and *Wahlenbergia stricta*. These species were selected to promote the ideal habitat conditions, this small amount will increase the optimum native seed bank in the soil profile while not overwhelming the integrity of the grassland. Some further revegetation work is due to be done to address light erosion along the creek line.

In January 2023 Project Officer Elyssa Castles went on site in the Googong township SE sanctuary block with Henry Xu, a podcast producer for Canberra: Conversations in the Capital to discuss the project and increase broader community education about the ecological community. The episode went live in May 2023 and had hundreds of listeners across multiple platforms including iTunes and Spotify. Cross promotion saw our social media audience increase and we were contacted with positive feedback about the project and ideas for further collaboration.

In May 2023 the first 3 parts of Luna the Stay-At-Home Cat were published. This series was created to help young people learn about cat containment, what it means for the environment and their home. This series supports a curriculum aligned resource that helps promote the idea that it is the responsibility of pet owners to ensure that their pets aren't a danger to themselves, the public or wildlife. This series showcases that cats are able to live fulfilled and enriched lives in the home, and provides children and their families with a tool to open dialogue within their communities about the importance of cat containment in relation to the environment. This series is part of a broader cat containment campaign that will involve onsite demonstrations and education building within the community. The Anglican School Googong and Googong Public School have been involved in this process and are eager to engage in upcoming presentations. The activity resource, critical thinking curriculum alignment and the books are being provided to the schools and we will continue to engage and offer our ongoing support if these resources are being utilised in classrooms. These books were published as ebooks and are accessible through the National Library of Australia www.trove.nla.gov.au. Large physical copies have been printed for internal use only, this includes going onsite for presentations.

Activity resources have been developed to support the education package and upcoming school site visits with ACT Snake Remover Gavin Smith. These activities were aligned with the NSW curriculum to build understanding and strengthen engagement with the Googong landscape and ecological communities.

Priority management site: South West Slopes

Local government area:

Hilltops; Upper Lachlan Shire;
Yass Valley

Partners:

South East Local Land Services

Ecological community outcome



On track



On track (inferred)



Not on track (inferred)



Not on track

The trend in viability is unknown at this time because the viability of the ecological community was not monitored and a critical threat was not monitored or managed this financial year.

Management actions

No management actions were planned at this site for the financial year.

Site summary

DRAFT

Priority management site: Southern Reserves

Local government area:

Cootamundra-Gundagai Regional; Greater Hume Shire; Hilltops; Junee; Queanbeyan-Palerang Regional; Snowy Valleys; Upper Lachlan Shire; Wagga Wagga

Partners:

Environment and Heritage Group

Ecological community outcome

- On track
- On track (inferred)
- Not on track (inferred)
- Not on track

The trend in viability is unknown at this time because the viability of the ecological community was not monitored and a critical threat was not monitored or managed this financial year.

Monitoring

Ecological community viability monitoring by one or more methods indicates response to management over time and provides an outcome measure.

Monitoring metric	Habitat condition
Annual target	Habitat condition is maintained across sites.
Long term target	Maintain and enhance the diversity and condition of the TEC within the site.
Monitoring result	Ecosystem condition maintained. 95% of priority weed plants were prevented from seeding, maintaining native groundlayer integrity.
Scientific rigour of monitoring method	Low
Conducted by	Environment and Heritage Group

Investment

Participant	Cash	In-kind
Environment and Heritage Group	\$16,710	\$0

Management actions

The following actions are those identified as being required in financial year 2022-2023 to maximise the viability of the ecological community.

Threat	Management action	Implemented as planned?
Degradation of remnants by non-native plant species, including noxious weeds, exotic pasture species and environmental weeds, including garden escapes, olives and pines.	Effectively control priority infestations, preventing >90% going to seed.	Yes
Habitat loss, degradation and fragmentation from agricultural, forestry, mining, infrastructure and residential development.	Manage vegetation regrowth to maintain heterogeneous habitat and ecosystem benchmarks.	Yes
Lack of community knowledge and appreciation of White Box Yellow Box Blakely's Red Gum Woodland and their component threatened species.	Liaise with public land managers.	Yes





DRAFT

Priority management site: Tarcutta Hills

Local government area:
Wagga Wagga

Partners:
Bush Heritage Australia

Ecological community outcome

-  On track
-  On track (inferred)
-  Not on track (inferred)
-  Not on track

The trend in viability is unknown at this time because the viability of the ecological community was not monitored and a critical threat was not monitored or managed this financial year.

Management actions

No management actions were planned at this site for the financial year.

Site summary

Saving our Species 2022-2023 annual report card for White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions. For more information refer to the specific strategy in the Saving our Species program.