

bushlandnews



Issue 116 **Summer** 2020-21 *Time of Birak and Bunuru in the Noongar calendar.*



My role as **Traditional** Fire Programs Coordinator

Photo – DFES.



Department of Biodiversity,
Conservation and Attractions



Bushland News is a quarterly newsletter of Urban Nature, a Department of Biodiversity, Conservation and Attractions Parks and Wildlife Service program to support community involvement in bushland conservation.

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This publication is available in alternative formats on request. Current and archived issues of *Bushland News* are available at pws.dbca.wa.gov.au/bushlandnews

Next issue

Autumn Bushland News

Autumn *Bushland News* contributions should be sent to [Urban Nature](#) by **15 March 2021**. *Bushland News* seeks original contributions. If your submission has been or may be published elsewhere please let us know. Compiled and edited by Anna Wisolith.

My role as Traditional Fire Programs Coordinator

By Wayne Ampetyane Davis

I am Wayne Davis. I use my skin name when introducing myself to traditional people out on Country as Tjampitjinpa. My skin group is the Kaitij people of Central Australia and I was born in Darwin.

I commenced as the Traditional Fire Programs Coordinator with the [Bushfire Centre of Excellence](#) in March 2020, travelling across from South Australia after just over three years with Anangu Pitjantjatjara Yankunytjatjara (APY Lands).

This role, a first for Western Australia, was a result of the rural fire management reforms announced by the State Government in April 2018 following the Special Inquiry into the January 2016 Waroona Fire (Ferguson Report).

Changes included the creation of a Rural Fire Division within the Department of Fire and Emergency Services (DFES) and the establishment of a Bushfire Centre of Excellence.

The Bushfire Centre of Excellence is one of five specialist teams in the Rural Fire Division which is driving improvements to bushfire training, bushfire mitigation activities and land use planning across Western Australia.

The Bushfire Centre of Excellence is focussed on the enhancement of bushfire management and is designed to be a learning and training hub for bushfire management personnel, including volunteers.

It is strengthening the way knowledge and skills are built and shared, with key functions including the management of knowledge, training development and training delivery.

This includes the knowledge and cultural practices of Aboriginal Australians who have used fire for thousands of years to care for Country.

The centre's [Traditional Fire Program](#) aims to gather and promote this knowledge and look at ways to combine cultural burning into contemporary fire management.

My key responsibility will be running the Traditional Fire Program, and together with the Traditional and Cultural Fire Officer will work towards incorporating and promoting the fire management knowledge and experience of Aboriginal people into the work of the Bushfire Centre of Excellence and its partners.

I am honoured to have the opportunity to share my wealth of knowledge and hands-on practical experience in traditional fire management.

My background includes more than 20 years in cultural land management, working on Country and supervising traditional fire management programs with ranger groups.

It also includes more than 10 years building capacity for Indigenous economic empowerment within communities across Western Australia, the Northern Territory, South Australia, Queensland and the Australian Capital Territory.



Traditional Fire Programs Coordinator Wayne Davis testing soil moisture and leaf litter dryness. Photo – DFES.

My cultural land management experience began in the early eighties when I was recruited to complete one of the very first Aboriginal ranger programs in Australia held within Kakadu National Park in the Northern Territory.

This career pathway strengthened my knowledge and experience in terms of learning from elders, traditional owners of the park and neighbouring communities.

Continued next page ...

The significance of cultural burning

Cultural burning describes burning practices that are performed by Aboriginal people as a way of keeping people and Country healthy.

These burns are small, low-intensity fires that minimise damage to ecosystems and landscapes and promote the application of cool fires at the right time, in the right way and by the right people.

Aboriginal people have used cultural burning for thousands of years and continue to practice cultural fire management to protect Country as well as support the regeneration of the landscape and the regrowth of native flora species.

Aboriginal ranger programs are continuing to learn and practice the cultural application of fire and traditional land owners are applying these techniques on their respective lands through their appropriate land councils and Aboriginal corporations.

In Western Australia and across Australia, cultural burning has been incorporated into contemporary land management practices as part of planned burning regimes.

The sustained application of both contemporary and cultural burning techniques is vital and provides a variety of strategies for traditional custodians, fire practitioners, land managers and local communities to reduce bushfire risk whilst protecting cultural and environmental values.



A patch of grass trees demonstrating a low intensity burn to ensure fauna habitats are maintained. Photo – DFES.

Through my learnings I discovered the ongoing transfer of traditional knowledge and that applying a two-way learning methodology is key to effectively managing large parcels of land.

As a team, we will engage with Traditional Custodians, land managers, and local communities to gain a better understanding of the role, application, uses and cultural connection with fire and focus on supporting communities in sharing, developing, implementing and promoting traditional fire programs and land management activities.

I feel privileged to be part of the Bushfire Centre of Excellence, working to foster a greater understanding of traditional techniques and how they can benefit us all.

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Restoration works at Lowlands Nature Reserve

By Grazyna Paczkowska

Restoration planting and fencing at Lowlands Nature Reserve was undertaken by Urban Nature in 2020 as part of funding received through Greening Australia's [Three Rivers Initiative](#). This involved infill planting along the Serpentine River to prevent erosion and provide fauna habitat within existing fenced off sites that were established in 2019 and within an additional new site.

An inspection prior to the 2020 planting showed that orange plastic safety mesh, which had been erected in some areas in 2019 to fence off restoration plantings, had disintegrated completely in sun exposed areas and was starting to deteriorate in shadier sites. Due to the fence damage, there was evidence that kangaroos had accessed the planted sites, grazing on and destroying some of the previous year's plantings.

Prior to starting any new plantings, the following recommendations were made:

- To replace all the plastic fence with a hinge joint mesh fence with the funding provided by Greening Australia.
- Infill plant the already established sites where the 2019 plants either died or were destroyed by kangaroos.
- Establish a new planting site in a strategic section of the river and use the hinge joint mesh fencing to protect it.

A fencing contractor was engaged to install the fencing, and a community planting event organised by Landcare SJ took place on 20 June where 850 seedlings of *Lepidosperma persecans* were planted. The event was attended by 16 volunteers and two DBCA staff.

DBCA continued to monitor and compare the survival of transplanted versus nursery grown plants of *Lepidosperma persecans*, a [project started in 2019](#) by year 11 conservation and land management students from Baldivis Secondary College. Results from surveys in June and October 2020 indicate that the overall survival of the tubestock is substantially higher (95%) compared to the transplants (28%). The management implications of these results are that although the initial cost of purchasing nursery tubestock is high, it results in greater survival of the plants. While the source of the transplant stock is 'free' – using parts of established plants growing within the reserve – the survival rate of the plantings is relatively low considering the time and labour required to dig out, divide, prune and transport the stock prior to planting.



Volunteers infill planted 850 seedlings of *Lepidosperma persecans* along the Serpentine River at Lowlands Nature Reserve as part of a community event organised by Landcare SJ on 20 June. Photo – Grazyna Paczkowska.



Left: Orange plastic safety mesh, which had been erected in some areas of Lowlands Nature Reserve in 2019 to fence off restoration plantings, had disintegrated completely in some areas by May 2020 leading to kangaroos destroying some of the previous year's seedlings. Right: Hinge joint mesh fencing was installed by a fencing contractor using the existing star pickets to replace the disintegrating plastic mesh. Photos – Grazyna Paczkowska.

The impressive results of hand weeding *By Aimee Connell*

COVID-19 has impacted on almost every aspect of our lives and presented numerous challenges to overcome. These challenges were felt keenly in the restoration efforts on Penguin Island as access was restricted for volunteers whose dedication has been invaluable to efforts thus far. However, with challenge comes opportunity. As an intern working with DBCA, I was able to travel to the island to assist with restoration efforts. These efforts are centred around hand weeding which will restore native vegetation, hopefully improving nesting habitat for [bridled terns](#) who migrate in springtime all the way from the Celebes Sea, north of Indonesia. Having only experienced Penguin Island from the boardwalk as a tourist, I was always disappointed to see the seemingly endless invasion of weeds, but off the beaten path, the results of restoration works are impressive and I feel optimistic for the future of the island. Where there were previously only weedy annual grasses and herbs, there are now pockets of established *Rhagodia* and even [nitre bush](#) (*Nitraria billardierei*). Now that restrictions are being eased and our volunteer base can get back to work, I am excited to see how the island will improve in the coming years. To see the restoration of such a unique landscape powered by the community will be quite something.

Continuing with the theme of hand weeding, I also had the opportunity to see its impact in a trial capacity on the incredibly rare [pyramid mulla-mulla](#) (*Ptilotus pyramidatus*) during my time at DBCA. Rediscovered a decade ago and known from just one location in the middle of suburbia, this small perennial herb is critically endangered and is at risk of competition from



DBCA intern Aimee Connell at Penguin Island hand weeding the area around caged sites, which aid revegetation of native species by protecting plants from disturbance by silver gulls. Photo – Grazyna Paczkowska.

aggressive bulbous species including harlequin flower (*Sparaxis bulbifera*) and cape tulip (*Morea flaccida*). As I squatted for several hours in an attempt not to crush the tiny plant while I surveyed it, the knowledge that this was the only known population of pyramid mulla-mulla in the world was running through my head and made the experience nerve-wracking (and leg-breaking)! However, upon finishing the count for all quadrants and



*DBCA intern Aimee Connell surveying quadrants for the incredibly rare pyramid mulla-mulla (*Ptilotus pyramidatus*). Photo – Grazyna Paczkowska.*

coming to the realisation that our efforts have been paying off, my nerves were quickly replaced with excitement. It was a surreal experience to be involved in a such an important and confidential task and I am grateful for the opportunity. With such a promising start to the hand weeding trial, I am very excited to see how much more we can learn about this obscure plant in the near future.

Snapshots of a busy spring *By Grazyna Paczkowska*



During this spring, Urban Nature and Perth Hills District staff mapped weed distribution within Bullsbrook Nature Reserve. And it was good to see two familiar faces back: Kim Kucera and Elisha Jacobs-Smith. Kim (in the left photo, together with Hannah Kilian) swapped her [fire uniform](#) for acting flora conservation officer duties. Elisha (right photo), a [Noongar boodjar ranger](#), proved to be a real asset during the mapping: he not only mastered the mapping technology and provided amazing insight into Indigenous knowledge, but also became the 'tick magnet', amassing some 30 or so ticks over the mapping time. Thanks Kim, Hannah and Elisha! Photos – Grazyna Paczkowska and Kim Kucera.

As part of the Peel-Harvey Catchment Council's [A world for woodlands project](#) we did hand weeding of pig face (*Carpobrotus edulis*) at Hymus block in Lowlands Nature Reserve. This proved to be a difficult and labour-intensive exercise as the plants were old and their stems were buried deeply in the ground and broke easily, meaning we had to dig out some stems to ensure we removed as much of the plant as possible. Any stem parts left in the ground might regenerate and therefore follow-up weeding may be needed. Thanks to Jenny Rose (Mandurah Regional Herbarium Volunteers) and William Fowler (Swan Coastal District, DBCA) for their hard work. Photo – Grazyna Paczkowska.

The Friends of Paganoni and Urban Nature surveyed and weed mapped the wetlands section of Paganoni Swamp Reserve. Despite being November, wellington boots were a must as the deeper sections of the wetlands still were underwater, some too deep to attempt crossing. We were all amazed at the overall excellent vegetation conditions of the wetlands. Pictured here are Leonie Stubbs and Erica Dearle from the Friends of Paganoni, at one of the amazing enchanting locations of *Melaleuca raphiophylla* forest. Photo – Grazyna Paczkowska.

These forest red-tailed black cockatoo (FRTBC) parents were spotted feeding their chick in a natural tree hollow in Cockburn this spring. FRTBC breeding in the Perth metropolitan area is uncommon, and it is rare to see the male feeding a chick at the nest, making this all round a very important record. Photo – Claire Greenwell.



BirdLife Australia
surveys find
**new black cockatoo
breeding sites**

By Adam Peck

Every year BirdLife Australia carries out breeding surveys of threatened black cockatoos (mainly Carnaby's cockatoo). This work is mostly done by experienced volunteers with support from BirdLife. BirdLife provides location data and access to 'Cocky Cam', a telescopic pole with a wireless camera. This enables nest hollows to be inspected without the risks associated with ladders or climbing. It also gives us much more accurate data than 'tap and flush', the main method used in the past. Surveyors would tap the tree trunk and if a hen flushed (emerged from the hollow) they would assume a breeding attempt. However, this could lead to false positives (flushing a prospecting bird) and false negatives (no flush, with hen and/or eggs and chicks in the nest).

This year has seen the launch of a new project, Protecting WA Black-Cockatoos (funded by the federal Department of Agriculture, Water and the Environment). A major aim of this project is to locate new breeding sites, so when news of Carnaby's cockatoos possibly breeding near Kalbarri came in I took the opportunity to visit the site. Carnaby's cockatoo has not been officially found breeding in the area since the 1990s, but this may be due to low survey effort rather than lack of breeding. After two days of fruitless searching in the rugged terrain, I located a nest with a female sitting on a single egg. This nest is quite significant, since it is 280km north of the nearest known, current breeding site! The site has plentiful hollows in river gums (*Eucalyptus camaldulensis*), access to water (the Murchison River) and plentiful food. More surveys should hopefully find additional nests and the find opens up opportunities for banding work, DNA work and even potentially satellite tracking. Another aim of this project is to engage landowners, and do on-ground work to support cocky breeding. These actions will depend on the site, but include revegetation, fencing, installation of artificial hollows and more.

Other new breeding sites have been located near Nyabing and Lake Clifton. In 2019, 20 'Cockatubes' (artificial hollows) were installed under the Alcoa Community Black-Cockatoo Recovery project. One of these is in Lake Clifton and has a Carnaby's cockatoo chick in it due to fledge soon. WA Museum data show breeding in this area, so it's good to confirm they are still there. Cockatubes have been very successful at many sites, especially for Carnaby's cockatoo. However, they do not work at all sites.



Above: A river gum tree with nesting hollow. Some of these ancient trees have a diameter of two metres! Their proximity to water and plentiful food make this area ideal for Carnaby's cockatoos to breed in. Photo – Adam Peck.

Right: A single Carnaby's cockatoo egg found in a nest near Kalbarri. This nest is 280km north of the nearest known, current breeding site! A second egg will soon be laid, but normally only one chick will survive and leave the nest. Photo – BirdLife.



Continued next page ...

For example, they have not been used by cockies at Murdoch University since 2013. Another site near Lake King with 21 Cockatubes shows Carnaby's cockatoos do not use them, preferring natural hollows. Location is the key and it seems areas on the periphery of Perth can be suitable where there is likely to be sufficient feeding resources. Good examples are Joondalup, Mandurah and Baldivis.

Another interesting breeding record was found this year. Forest red-tailed black cockatoos (FRTBC) were reported breeding throughout the south-west, with this year shaping up to be one of their best in recent times. Claire Greenwell reported FRTBC in a natural nest in Cockburn in September. The bird seen at the hollow entrance was assumed to be a female. When we went to survey with Cockey Cam the bird quickly retreated to the nest floor, so it was not possible to view eggs or chicks. Patience was the key to this survey. After an hour or so a pair of FRTBC flew into the area and called. At this call the bird in the nest came back up to the hollow entrance and it was clear that this was the chick, very close to fledging. Both parents then flew in and fed the chick at the hollow entrance. Apparently the male feeding the chick at the nest is very rare. FRTBC breeding in the Perth metropolitan area is also uncommon, so all round this is a significant record. The chick left the nest with its parents in early October.

If you ever see black cockatoos entering or exiting hollows please [let us know](#). The data is treated confidentially and goes into the jointly managed BirdLife/DBCA database. The more data we have the better we are able to protect habitat and make well-informed planning decisions.

On another note, don't forget about the upcoming Great Cockey Count on Sunday 28 March. [Registrations](#) will open mid-January.



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*This female was prospecting hollows. They do this for several days or even weeks, going from one hollow to the next to find the best available nest. The male is usually nearby but lets his mate do the hard work!
Photo – Adam Peck.*

Keeping Western Australia myrtle rust free By Karla Forrest and Emer O’Gara

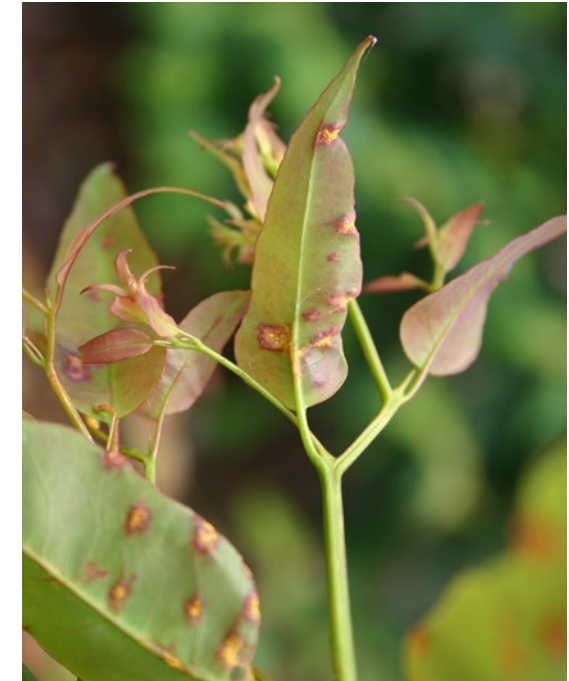
Despite the challenges it has presented this year, the COVID-19 pandemic has provided a unique opportunity for people working to identify and combat a variety of plant diseases. As the entire world has become more conscious of hygiene from a perspective of person-to-person disease transmission, the natural world can also benefit.

Myrtle rust (*Austropuccinia psidii*) is one of the diseases being targeted by DBCA and the Department of Primary Industries and Regional Development (DPIRD).

Myrtle rust is an introduced and highly invasive fungal disease of plants. It is native to South and Central America, but has invaded other regions globally such as Florida, California, Hawaii, Japan and China. It affects plants within the Myrtaceae family. It was first detected in New South Wales in 2010 and given the common name of myrtle rust. The disease has since established along the entire mainland eastern seaboard in Australia, in parts of the Northern Territory, and marginally in parts of Tasmania and Victoria.

Signs and symptoms

- Masses of bright yellow or orange-yellow spores, first appearing on the underside of leaves
- Lesions on young, actively growing foliage, as well as floral buds and young fruits
- Buckled or twisted leaves
- Rust lesions on plant species such as bottlebrush are purple in colour and sometimes spores are dark brown



Myrtle rust has not yet been recorded in Western Australia or South Australia, but if present, has the potential to spread quickly and have a substantial impact, especially given it is airborne.

It is a serious plant disease that attacks and kills plants in the Myrtaceae family including eucalypts, bottlebrushes, paperbarks and peppermint trees. More than half of Australia’s Myrtaceae species occur in Western Australia, and more than 1,800 are in the State’s south-west. Two extremely susceptible hosts include the endemic and iconic peppermint tree (*Agonis flexuosa*) and Geraldton wax (*Chamelaucium uncinatum*). With the presence of susceptible host species in Western Australia’s south-west and a climate suitable for establishment of the pathogen, myrtle rust could have a significant impact if it arrives.

Left: Bright yellow myrtle rust spores, shown here on a eucalypt leaf, are one of the major signs of the plant disease to look out for. Photo – Louise Morin.

Above: Discoloured lesions and yellow spores of myrtle rust can be seen on the underside of these eucalypt leaves. Photo – Geoff Pegg.

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So what can be done? Awareness is the best tool available. The more people that know about myrtle rust, what it looks like, how to report it and how to maintain good hygiene to prevent it, the better. Early detection is key to preventing spread.



Bright yellow myrtle rust spores on a Geraldton wax under laboratory conditions. Photo – Louise Morin.

How to prevent myrtle rust

Myrtle rust has aerial spores (i.e. they can be carried in wind and rain), so before entering WA from overseas or interstate (regardless of whether it is work-related or personal travel) ensure that:

- machines, vehicles, equipment, clothing, footwear and hair are thoroughly washed
- items that are not easily washed, such as caps, backpacks, camera cases, gaiters are emptied, brushed clean and spritzed with a 70 percent ethanol solution.

How to report suspected myrtle rust

Report any suspected sightings immediately:

- MyPestGuide™ app (available on the [App Store](#) and [Google Play](#))
- mypestguide.agric.wa.gov.au
- DPIRD Pest and Disease Information Service: 9368 3080 or [email](mailto:myrtle.rust@dpiird.gov.au).

Contact

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Fauna spotters wanted

Calling all those with a love for our native fauna! Assist with important fauna conservation work from the comfort of your own home! I am seeking volunteers to identify fauna images captured in a motion-sensing camera survey conducted over the winter and spring months in the Perth Hills area. All you need is a computer, the internet, an interest in our native (and feral) fauna and a keen eye for detail. Please [get in contact](#) if you are interested in helping out.

Photo – DBCA.

Contact

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Keep an eye out for African clubmoss By Jodie Gysen

The Department of Primary Industries and Regional Development (DPIRD) is asking garden retailers to advise if they are stocking a declared plant called African clubmoss (*Selaginella kraussiana*).

This plant was recently found on two properties in Denmark and in a nursery in Perth. It is naturalised in eastern Australia but is not established in Western Australia.



A close-up photo of African clubmoss, showing the small leaves (2–4mm) that grow in rows along the stem. Photo – DPIRD.

This plant, also known as Selaginella or spreading clubmoss, is an invasive fern ally (not a true fern) that forms extensive dense carpets in damp sites like forest floors and stream banks.

It has a smothering effect that prevents seeds from reaching the soil, impacting native plant regeneration. This results in higher light levels, leading to the growth of more aggressive weeds such as vines.

DPIRD is carrying out surveillance to determine if there has been spread, and if it is being sold in Western Australia. It is a requirement under the *Biosecurity and Agriculture Management Act 2007* to report declared plants to DPIRD.

African clubmoss is considered to have little impact on agricultural areas but is an environmental weed. Characteristics include:

- carpet-forming groundcover
- long, fine roots from the nodes
- creeping, slender, and irregularly branched stems that root at nodes, forming a loose mat
- small leaves (2–4mm) in rows along the stem.

If you think you have seen this plant, please contact DPIRD's Pest and Disease Information Service by [email](#) or phone (9368 3080). You can also take a photo and submit it [online](#) or via DPIRD's [MyPestGuide™ Reporter app](#).

You can also learn more, including control options, by visiting the [DPIRD website](#).



African clubmoss (*Selaginella kraussiana*) is a declared plant that was recently found on properties in Denmark and a nursery in Perth. It is not established in Western Australia but has the potential to become an environmental weed if it spreads. Keep an eye out for it and report any sightings to [DPIRD's Pest and Disease Information Service](#). Photo – DPIRD.

Contact

DPIRD Pest and Disease Information Service

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phone 9368 3080

Please send us your regional report (400 words) and one or two photos by Monday 15 March 2021. Text may be edited in response to volume of submitted reports.

A year of recovery after fire at Yanchep National Park *By Ciara McIlduff*

Natural disasters can be frightening and confronting, but they can also bring out the best in people and can unite communities. The wildfire that raged through Yanchep National Park on 11 December 2019 triggered an outpouring of concern from the Yanchep National Park family and the wider Yanchep community. Within hours of the fire igniting we were inundated with offers of assistance, with countless locals asking what they could do to help.

And the BIG question ... how are the koalas? We are happy to report that the koalas fared very well during the fire as our operations crew have installed a reticulation system to keep their enclosures wet,

and they were constantly under the watchful eye of fire crews and Ranger Phillipa Carboon. The koalas continue to be a main attraction here in the park and a constant delight for visitors watching their antics – or lack thereof for the most part!

Local fire crews were first on the scene and worked tirelessly and valiantly on their patch, using local knowledge to save historic park infrastructure. Areas of peat around the wetlands burned for many months following the wildfire. Fire crews, under the guidance of Senior Ranger Mark Varley, used their ingenuity to install bores which fed a reticulation system to constantly water hotspots in an effort to extinguish the peat fires.



Volunteer Jacqui McGhie took a series of photo monitoring shots documenting the amazing regeneration at Yanchep National Park, shown here after the fire (top) and nearly a year later (above). Photos – Jacqui McGhie.



Following the fire in December 2019, Yanchep National Park volunteers spent weeks removing an astonishing amount of dumped rubbish. Photo – Ciara McIlduff.

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It has now been nearly a year since the fire and Yanchep National Park is recovering well, the bush has regenerated beautifully and we had one of the best wildflower seasons in many years – particularly in the burnt zones, highlighting the important role that fire plays in our ecosystem.

Our team of dedicated and passionate volunteers have been focusing on the momentous task of removing weeds that have established after the disturbance, making way for native flora species to flourish. They also spent many weeks removing an astonishing amount of glass and other dumped rubbish that had been exposed with the absence of vegetation cover.

Volunteers have been busy monitoring wetland water quality for any adverse effects from the fire, photo monitoring the amazing post fire regeneration, keeping an eye out for injured animals, and educating tourists about the dangers of entering the burnt ground. The volunteer group will be utilising a Federal grant through the Communities Environment Program with a focus on the restoration of Loch McNess and adjacent wetlands.

It has become evident from the outpouring of support that Yanchep National Park holds a special place in the hearts of many and we would like to thank all of the staff, volunteers and community members who are helping this special place and its inhabitants rise from the ashes.

Top left: Volunteer Wendy Nalder picks up a glass bottle that was littering Yanchep National Park. The large amount of glass and other rubbish littering the park became apparent with the absence of vegetation cover.

Above: Volunteers at Yanchep National Park have been focusing on the momentous task of removing weeds that became established after the fire – here volunteer Franco Tollardo is working on the removal of blackberry nightshade. Photos – Ciara McIlduff.

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Cockburn Community Wildlife Corridor *By Sally Marsh*

Building awareness and tackling littering in Blackwood Avenue bushland



Southwell Primary School went on an excursion to the Blackwood Avenue bushland as part of a project with the Cockburn Community Wildlife Corridor to help build awareness for the value of their beautiful bush 'backyard' and to discourage littering. Photo – Susan Flavell.

The Blackwood Avenue bushland is an important connecting link in [Cockburn Community Wildlife Corridor's](#) (CCWC) proposed wildlife corridor from the Beeliar Wetlands to the ocean. The Keep Australia Beautiful Council has provided funding to the CCWC to address littering. Part of the project involves working with children from Southwell Primary School to build awareness of the value of the beautiful local bushland, and discourage littering and dumping in this area. The school is working with Hamilton Hill artist, Susan Flavell, over a six-week period to develop a large 2m x 1m sign that will illustrate the bush plants and animals and have a 'Don't Rubbish Blackwood' and 'Keep Blackwood Beautiful' message. An excursion to the nearby bushland was used to give the children an insight into their bush backyard, and ideas for their art. They've been busy over the last month producing drawings and paintings that will be used on the sign.

Other aspects of the project involve an awareness campaign, litter audit and rubbish removal, involving the local community and businesses. The completed sign will be erected near the bushland in early 2021 and celebrated with a community barbecue.



Southwell Primary School students' illustrations of Blackwood Avenue bushland flora and fauna. The school is working with local artist, Susan Flavell, to create a large sign illustrating bush plants and animals, which will have a message of 'Don't Rubbish Blackwood' and 'Keep Blackwood Beautiful'. Photos – Susan Flavell.

Overall, we are aiming to reduce littering and dumping, and create a local culture of respect and caring for urban bushland and wildlife by involving school children and local residents in the project. The Blackwood Avenue bushland has some particularly beautiful old grass trees and *Nuytsia floribunda* (the Western Australian Christmas tree). We believe the project will provide opportunities for locals to gain a greater appreciation of this bush remnant and provide oversight of the area.

Cockburn Community Wildlife Corridor *By Sally Marsh*

Planning the pathways for the rehabilitated Roe 8 area

The Rehabilitating Roe 8 Advisory Committee (RR8AC) is making initial plans for pathways through the Roe 8 area. CCWC held a facilitated workshop on 28 November to provide a forum whereby CCWC members and other interested people could contribute their views on the paths and trails through the Roe 8 section of the corridor. The main job was to gather people's thoughts and ideas which CCWC (as part of the RR8AC) can then take to the land manager who is coordinating the Rehabilitating Roe 8 Management Plan at the City of Cockburn.

Participants were encouraged first to think about the principles on which they would later base the design of their trails and pathways in terms of: (a) what they wanted to *protect*, (b) how they wanted to *use* the corridor, and (c) what *connections* they thought were missing. Part two involved people designing the pathways and trails and actually drawing and annotating maps showing where they wanted them to go and why. There were of course differing opinions, and all these ideas will be summarised in a report to the RR8AC to feed into the pathways design process.



Workshop participants working on designing pathways to go through the Roe 8 section of a proposed wildlife corridor from the Beelihar wetlands to the ocean. Photo – Louise Ainsworth.

CCWC believes strongly that recognising community ownership is and will be a key part of the stewardship in creating, protecting and maintaining this wildlife corridor and any parts of it now and in the future.

Contact

Sally Marsh

Cockburn Community Wildlife Corridor
email mailcockburnwild@gmail.com

Chestnuts herald Christmas *By Karen Clarke*

One of the delights in Warwick Bushland leading up to Christmas are the chestnut sun orchids (*Thelymitra fuscolutea*). They are the last of our orchids to flower, November to early December, and herald the arrival of Christmas. Endemic but widespread in south-west WA, they continue flowering after Christmas on the cooler, wetter south coast. They are pollinated by native bees but the orchid lures them in with false advertising as there is no available food (Christmas hype!). For the past seven years the Friends of Warwick Bushland, led by Mark Brundrett, has been monitoring our population of about 100 'chestnuts'. This year we counted 74 flower spikes with 440 flowers. On average only one in twenty flowers sets seed. Due to the drought and heat of early summer, the leaves may even die back before flowering. Despite this, they successfully flower and seed – a truly heartening Christmas story.

*Chestnut sun orchid
(Thelymitra fuscolutea) close-up.
Photo – Mark Brundrett.*



Pets Away, Possums Play

By Nicole Lincoln

[Pets Away, Possums Play](#) is a [GeoCatch](#) campaign that launched in 2019 to remind pet owners that keeping pets (cats and dogs) contained reduces injury and death to the critically endangered western ringtail possum, and has the ripple effect of protecting other urban native wildlife.

The campaign is supported by interventions designed to inspire, upskill and promote responsible pet ownership throughout the Geographe Bay Catchment. [Catio Cast](#), [9 Lives](#), and [Kitty Cat School](#) have been our most successful cat ownership interventions so far, providing cat owners with the confidence and expert knowledge on how to transition cats to living indoors, how to keep contained cats happy and healthy, and what design features make a great catio (cat run).

GeoCatch has spent a large part of 2018–19 developing this campaign using community-based social marketing methodology to encourage behavioural change. The 'Pets Away, Possums Play' message was developed in collaboration with community stakeholder workshops and other partnerships in the Geographe Catchment.

Local evidence suggests that the greatest known causes of death to possums and wildlife in our catchment are cats, dogs, motor vehicles, and habitat loss. It is also accepted in the scientific arena that cats prey on more than 186 kinds of native Australian birds, 64 mammals, 87 reptiles and 10 species of amphibian and numerous invertebrates.

The campaign message 'Pets Away, Possums Play' responds to injury and death caused by pets, and aligns with national and Statewide campaigns and attitudes delivered and supported by City of Busselton,



Proud catio (cat run) owner Elise Parker. Being a responsible pet owner starts with you and means ensuring the welfare and wellbeing of your pets as well as protecting the possums, and other native wildlife. Photo – Nicole Lincoln.

Parks and Wildlife Service, RSPCA, Cat Protection Society: The Good Neighbour Project, SAFE, Victoria Zoo: Safe Cat Safe Wildlife, National Cat Tracker Project and other local government responsible pet ownership campaigns, aimed to reduce predation of wildlife by cats and dogs.

Pets Away, Possums Play is delivered by GeoCatch with support from South West Catchments Council through the Australian Government's National Landcare Program, and the State NRM Program in the Geographe Bay Catchment.

The campaign forms part of GeoCatch's iconic [Peppies for Possums](#) project that aims to

increase community awareness of the critically endangered western ringtail possum. GeoCatch will continue to deliver a range of community events over the next three years to help consolidate and educate the community on best practices to help foster responsible pet ownership throughout the Geographe Bay Catchment.

Contact

Nicole Lincoln

GeoCatch

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phone 9781 0111

Fox tracking informs better fox management

By Peter Nash

The [South West Group](#) (SWG) has just concluded a three-year project to track foxes in south-west metropolitan Perth to better inform future fox management. Coordinated and managed by the SWG and supported by funding from the State NRM Program, this project involved seven adjoining local governments (the Cities of Canning, Cockburn, Fremantle, Kwinana, Melville and Rockingham and the Town of East Fremantle) which together account for approximately 35 percent of the Perth urban metropolitan area. On average, they spend a total of around \$77,000 per annum on fox trapping and remove an average of 40 foxes per annum from local government managed reserves in the region. These local governments sought to better understand how and where foxes move through the urban landscape so that future control efforts can be targeted where their impact will be greatest.

GPS collars were fitted to 17 adult foxes and their movement patterns were analysed. Of the 17 foxes collared, 13 provided sufficient data to allow their home range (defined in this study as the area within which the fox spent 95 percent of its time) to be calculated. Home ranges varied from 1.3–5.1km². Most of the foxes in the study spent the majority of their time within natural areas (e.g. bushland and wetland reserves, coastal dunes, golf courses) with infrequent forays into surrounding residential and/or industrial areas, usually travelling at night along road or rail reserves, through bushland or sparsely

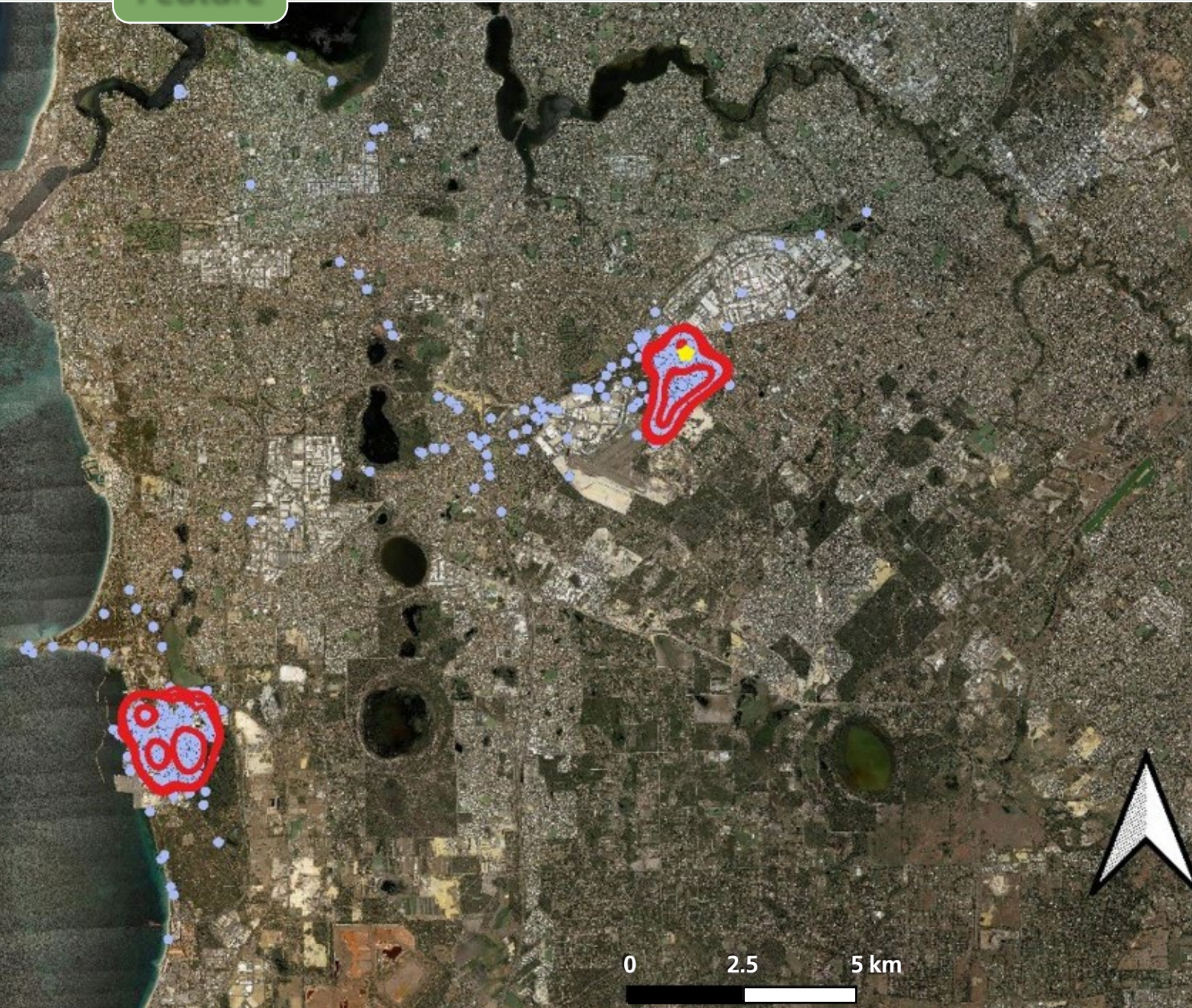
vegetated corridors to access these places. These forays were usually short, with the fox returning to its home range within a few hours or by morning. However, where residential blocks are larger and homes are further apart, foxes ventured much more frequently into private property. One collared fox spent the majority of its time within a recycling facility where it clearly had a reliable source of food.

However, one collared male fox proved to be extremely mobile and capable of moving quickly through densely populated areas. This particular fox was trapped in Ken Hurst Park to the north of Jandakot Airport and spent the next three months in that general area. But on one night in May it travelled over 23km, moving along the rail line then through a series of residential areas and small bushland reserves to arrive at the Swan River at Bicton, before travelling along the foreshore to Alfred Cove, then to Wireless Hill Reserve where it remained during the day. On the following night it made its way through residential suburbs and along the rail line back to Ken Hurst Park, travelling over 13km on this leg of the journey. Three days later it travelled west along the rail line into Beeliar Regional Park, through the Spearwood industrial area, then through residential areas to a wetland south of Market Garden Swamps where it rested during the day before eventually arriving in the Woodman Point Regional Park late in the afternoon. From here it moved into the Henderson Industrial Estate where it took up residence. This fox travelled in excess of 15km in a night on this journey.

Continued next page ...



Ready to be released, this is one of seventeen foxes that were fitted with GPS collars as part of a project tracking their movements within south western metropolitan Perth, to help inform future fox management. Photo – Graham Thompson.



The results of this project together with a suite of recommendations to improve the effectiveness of future fox control measures in the south-west metropolitan region are included in an 80-page [summary report](#). The recommendations to improve the effectiveness of future fox control measures include: improved collaboration and coordination between all land managers, more trapping on State government managed lands and large privately owned landholdings, longer and more frequent trapping programs, using complimentary control measures (shooting and detector dogs) in addition to trapping, improved collection and sharing of information, and increased encouragement and enforcement of fox control by State government regulators.

Contact

Peter Nash

South West Group

email nrm@southwestgroup.com.au

phone 0413 032 654

GPS fixes show the two distinct home ranges (Ken Hurst Park in the north east, and Henderson Industrial Estate in the south-west) and the path travelled by this adult male fox when it dispersed from one to the other. Image – Terrestrial Ecosystems.

Rose's shadeskink: first record of introduced species on the Swan Coastal Plain

By Nicole Willers

In May 2019, a small skink previously only known from northern New South Wales and southern Queensland was found at Lake Joondalup. The skink, commonly known as Rose's shadeskink (*Saproscincus rosei*) was detected during a fauna survey by consultants and was the first record of the species in Western Australia.

Rose's shadeskink is a small skink endemic to rainforest and wet sclerophyll forests. In its natural environment it lives in leaf litter, fallen logs and rocks in rainforests and adjacent moist habitats. The genus *Saproscincus* is comprised of 12 small, diurnal or crepuscular lizards found mainly in moist, shaded forest habitats in eastern Australia.

The following brief description is taken from Cogger and Wilson & Swan's reference works on reptiles. Rose's shadeskink is a long-tailed skink approximately 60mm in length from snout to vent. They are typically brown above with narrow, ragged-edged dark stripes along the body, reddish-brown stripes on the hips and tail, and narrow dark stripes running along the underside of the tail. The backs can be uniform, scattered with paler scales, or feature a mosaic of lighter and darker scales. The reddish-brown hip stripe can be very prominent in females. The belly and undersides are cream with scattered brown spots or longitudinal rows. There is a distinctive pale yellow spot at the back and base of the thigh.



Rose's shadeskink (Saproscincus rosei) is an introduced species to Western Australia that was recently detected in the State for the first time during a fauna survey at Lake Joondalup. The skink is typically brown above with narrow, ragged-edged dark stripes along the body, reddish-brown stripes on the hips and tail, and narrow dark stripes running along the underside of the tail. Pictured here is an adult male. In females, the reddish-brown hip stripe can be very prominent. Photo – Mark Cowan.

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Following the initial detection of Rose's shadeskink in May 2019, additional surveys were conducted in January and March 2020 in surrounding vegetation. With assistance from the WA Museum, these surveys captured a further 14 individuals and showed that the shadeskinks were successfully breeding and had an extended breeding season. Seven native skink species were also captured during these surveys, but Rose's shadeskink had the highest abundance out of all skink species captured.

It is not known how Rose's shadeskink arrived in Lake Joondalup, or how long it has been there. It is also unclear if the species is more widespread in the Perth area, but not yet detected. Rose's shadeskink lays eggs, sometimes communally, so it is feasible that eggs from several individuals could have been transported within soil associated with imported plants.

Further surveys are planned to determine if the skink occurs all around the fringing vegetation of Lake Joondalup, or just in particular areas. Once this is known, DBCA will determine whether the skink is likely to pose a threat to native skink species.

Rose's shadeskink may threaten local biodiversity values by directly competing with native species for resources. Over time this could lead to declines in the abundance of competitively disadvantaged species, resulting in changes to both diversity and community structure of native reptiles. A research project at the University of Western Australia is also monitoring for the shadeskink during surveys of reptile diversity across Perth metropolitan reserves.

References

Cogger H (2014) Reptiles and Amphibians of Australia *CSIRO Publishing*, Collingwood.

Wilson S, Swan G (2013) A Complete Guide to Reptiles of Australia, Fourth Edition *New Holland Publishing*, London.



Rose's shadeskink has a distinctive pale yellow spot at the back and base of the thigh. However, there are similar-looking native species that could be confused for this introduced species, so please do not move, capture or disturb any skink species. If you come across a suspected Rose's shadeskink, please take a photo, note the location and [email](#) the information to Nicole Willers. Photo – Mark Cowan.

There are similar-looking native species that could be confused for Rose's shadeskink. Please do not move, capture or disturb any skink species. If you come across a suspected Rose's shadeskink, please take a photo, note the location and [email](#) the information to Nicole Willers.

Contact

Nicole Willers

DBCA

email nicole.willers@dbca.wa.gov.au

Landcare SJ marks 18-year milestone

By Francis Smit

People are at the heart of all community matters and critical to Landcare success. Respecting people, improving the quality of living, appreciating and supporting cultural differences, and being good stewards of land, air, water, and flora and fauna are the values that guide [Landcare SJ](#). Our mission is to provide means for the community to care for the land today, in a way that will leave it better for tomorrow.

Landcare SJ achieved a milestone in November 2020: 18 years since incorporation. Over those years, Landcare SJ has guided, encouraged, supported and coordinated community

passion for the environment in the Shires of Serpentine Jarrahdale and Murray, 45km south of Perth.

Working in partnership with the SJ Land Conservation District Committee, the group addresses landcare and natural resource management issues across a range of soil types on the Darling Scarp and Swan Coastal Plain, which contribute to a diversity in vegetation complexes and create valuable habitat for a wide variety of fauna. Significant waterways include the Serpentine River, along with smaller waterways, drains and wetlands, which feed downstream into the internationally Ramsar recognised Peel-Yalgorup System.



Keeping the doors open for 18 years is no easy task in any business, and has been achieved through careful management by a volunteer board consisting of local environmentalists, farmers, business people, academics and landholders. Annual wage support from the Shire of Serpentine Jarrahdale – the first local government in Western Australia to adopt a biodiversity strategy – has been a significant factor in our longevity. Much of Landcare SJ's work assists with and delivers on the Shire's environmental goals and objectives through projects such as the [annual free verge plant program](#), [Healthy Habitats Biodiversity Stewardship Program](#) on private property, and the enhancement and protection of bushland reserves. Local revegetation projects are supported with school and community planting days including [National Tree Day](#), and a recently new corporate and community engagement initiative, a midweek [R U OK?](#) planting day and morning tea.



*Planting rain, hail or shine with North Dandalup Primary School.
Photo – Landcare SJ.*

Continued next page ...

State and Federal Government environmental priorities are addressed locally through grant funding from various agencies. Landcare SJ facilitated and supported the establishment of the [Peel Harvey Biosecurity Group](#) between 2014–17, working with five regional local governments and the community under the WA Government *Biosecurity and Agriculture Management Act 2007* (BAM Act). The State Natural Resource Management Office has regularly supported Landcare SJ initiatives through grant funding for community capacity building, including support for field days, workshops and information sessions, and on-ground remediation projects such as revegetation, equine landcare, biosecurity, dieback treatment, fauna protection and waterway management. Lotterywest has provided funding for IT system upgrades and publications which support both organisational and community capacity.

Through Landcare SJ's association and close delivery partnership with the Peel-Harvey Catchment Council, current projects concentrate on sustainable agriculture, black cockatoo recovery, and enhancement and protection of banksia woodlands.



*Nest boxes destined for 2020 bushfire recovery of the glossy black cockatoo (*Calyptorhynchus lathami*) in South East Queensland, Mallacoota and Kangaroo Island. Photo – Landcare SJ.*

Previous projects have focused on improving water quality into the Peel-Yalgorup System through waterway improvements, riparian revegetation, riffle design and installation, and stock exclusion fencing.

Landcare SJ undertake contracted landcare services with a range of corporate partners. Working along the rail corridor through Serpentine-Jarrahdale Shire to protect and enhance threatened ecological communities and declared rare flora is supported by an agreement with Arc Infrastructure. This project includes the use of fire, monitoring transects, weed control and revegetation. Over the past two years, contract work to remediate and offset a local sand mine block has supported operational expenses. Landcare SJ has also signed an agreement with the Shire of Murray to deliver landcare services over the next three years.

Enterprise income has provided additional cash flow. Trees cut down in the development of the Forrest Highway were transported, milled and sold, particularly to the bespoke furniture industry. The manufacture and development of nest boxes and artificial hollows have been a long-term enterprise. The [Cockatube® nest box](#) for black cockatoos was a project initiated in 2005. The design stemmed from a local presentation by Ron Johnstone of the WA Museum, and the supply of mining waste pipe for recycling.

Over the past 15 years, Landcare SJ has worked with various agencies in a continuous improvement of the design. The request by researchers Rick Dawson (DBCA) and Denis Saunders (CSIRO) for a 400mm x 1500mm tube hollow resulted in the greatest modification to the project. After delivering the 60kg beasts, the move to a lighter weight pipe revolutionised the design and utility of the Cockatube. Over six years working with Rick and Denis, the design specifications have resulted in optimal dimensions for black cockatoo breeding. The Cockatube is now the go-to design for black cockatoo recovery across Australia, and modified nest boxes have been supplied to support palm cockatoo breeding in Weipa in Queensland.



Cockatubes, the original cockatoo tube nesting box, was researched and developed by Landcare SJ in cooperation with the WA Museum and DBCA. This one was installed on a Monday and colonised Thursday! Photo – Rick Dawson.

This year, through the generous support of our suppliers, Landcare SJ was able to manufacture and supply over 100 artificial hollows for bushfire recovery of the glossy black cockatoo in South East Queensland, Mallacoota and Kangaroo Island.


Our story continues ...

Contact


Francis Smit Landcare SJ
 email francis@landcaresj.com.au
 phone 9526 0012

Recurrent activities

Saturdays 15 minutes before sunrise

 **Research into bird populations** with the **Herdsmen Lake** Bird Banding Group. Contact: Bill 0438 910 252 calidris@iinet.net.au


Saturdays 8am–9am

 **Guided walks** with Friends of **Koondoola**. Second Saturday of each month. Meet Gate 2, corner Koondoola Ave and Burbridge Ave, Koondoola. Contact: David 9448 9192


Saturdays 8am–9am

 **Guided walks** with Friends of **Lake Gwelup** naturalist David Pike. Third Saturday of each month. Meet at Scout Hall Carpark (near the tennis courts), Huntriss Rd, Gwelup. Contact: friendsoflakegwelup@gmail.com


Saturdays 8am–9am

 **Guided walks** and meeting with Friends of **Landsdale**. First Saturday of each month. Meet at third gate Landsdale Rd, east of Landsdale Farm School, Darch. Contact: David 9448 9192


Saturdays 8am–9am

 **Guided walks** with Friends of **Star Swamp**. Fourth Saturday of each month. Meet at the Henderson Environment Centre in Groat St, North Beach. Contact: Christine 0430 013 364

Saturdays 8am–9am

 **Guided walks** with Friends of **Trigg** Bushland. Fifth Saturday of each month. Meet in St Mary's School carpark, off Elliot Rd Karrinyup. Contact: David 9448 9192

Saturdays 8am–10am


 **Bushcare activities** with Swan Estuary Reserves Action Group at **Alfred Cove** Nature Reserve. Fourth Saturday of each month. Contact: Cathie 9339 2439 oneillc@westnet.com.au

Opportunities for you to participate! Visitors always welcome but please confirm activities with contact person. Most activities are FREE!


Saturdays 8:30am–10.30am

 **Bushcare activities** with Swan Estuary Reserves Action Group at **Pelican Point**, Crawley. First Saturday of each month. Contact: Cathie 9339 2439 oneillc@westnet.com.au


Saturdays 9am–11am

 **Bushcare activities** with the Friends of **Booragoon** and **Blue Gum Lakes**. First Saturday of each month. Meet at the boardwalk into Booragoon Lake on Aldridge Rd, Booragoon. Contact: Mary-Ann 0456 357 799 molly.olly1@bigpond.com


Saturdays 9am

 **Bushcare activities** with Friends of **Brixton Street** Wetlands. Third Saturday of each month. Meet Alton St, Kenwick. Contact: Regina 9459 2964 tjdrd@bigpond.net.au


Saturdays

 **Bushcare activities** with Friends of **John Forrest** National Park. Equipment, instruction and morning tea provided. Starting times and tasks change according to the season. Contact: Jan 0409 299 861 joejanking1@bigpond.com


Saturdays and Tuesdays 9am–12 noon

 **Bushcare activities** with Friends of **Yellagonga** Regional Park. Nursery and project work each Saturday and Tuesday morning, regular workdays on the last Saturday of each month. Contact: friendsofyellagonga@bigpond.com

Saturdays, Sundays 9am–12 noon

 **Koala maintenance** at **Yanchep** National Park. Contact: Ciara 9303 7771


Sundays 7am

 **Bushcare** every Sunday with **Friends of Point Peron**. Look for the signs Safety Bay Rd or Memorial Dr Rockingham. Bring your own gloves, water and dress for the bush. Contact: James 0455 157 547 jgumme@live.com.au

Sundays 8am–10am

 **Bushcare activities** every Sunday with Friends of **Shenton Park** Bushland. Contact: Dani 0420 334 601 bojel@iinet.net.au

Sundays 8:30am

 **Bushcare activities** with Friends of **Wireless Hill**. Second and fourth Sunday of each month. Meet at main carpark. Contact: Margaret 0402 105 649 s3mmatthews@hotmail.com


Sundays 9am–11am

 Friends of **Lake Claremont busy bee** and morning tea, second Sunday of each month. Meet at the south end of Strickland St, Swanbourne. Gloves and tools provided. Contact: 0416 614 696 www.friendsoflakeclaremont.org


Sundays 9am–11am

 **Bushcare activities** with **Cottesloe** Coastcare. First Sunday of each month. Contact: Robyn 9384 7668, info@cottesloecoastcare.org website

Sundays 9am–12 noon

 **Bushcare activities** with the Friends of the **Spectacles** (Kwinana). Third Sunday of each month. Contact: Lynda 0419 983 956 fotsmail@gmail.com

Sundays 9am

 **Bushcare activities** with the Friends of **Samphire Cove** Nature Reserve, Halls Head. Last Sunday of each month. Contact: Barry bjsdoongin@gmail.com [Facebook](https://www.facebook.com/bjsdoongin)

Registration/contact details

Birdlife WA All walks are free, no need to book. Call 9383 7749 Monday–Friday 9.30am–12.30pm.

Activities Key



Hands on – bushland and wetland management activities.



Walks and tours – look, listen and enjoy guided walks and excursions




Skills development activities – talks, presentations, training courses and workshops.




Meetings and events – group meetings, expos, festivals and conferences.


Sundays 9:45am–12 noon

 **Bushcare activities** with the Friends of **Piesse Brook**. Third Sunday of each month. Contact: Ken 9293 3159 bibbulman@hotmail.com 0402 243 351


Sundays 1pm–4pm

 WA Gould League's **Herdsman Lake** Wildlife Centre holds **family nature days**. First Sunday of each month. \$5/\$20 family. Corner Selby St and Flynn St Wembley. Contact: 9387 6079 or register

Sundays

 **Wilson Wetlands** Action Group undertakes regular **work mornings** throughout the year on Sunday mornings. Contact: 0407 135 412 wilsonwetland@gmail.com

Mondays 7am–8am

 Norma's Monday Morning **Weeding Group**. Friends of **Lake Claremont** weekly hand weeding. Learn basic weeding techniques and identification. Meet at south end of Strickland St. Contact: 0413 282 515

Mondays 8am–10am

 **Litter collection** with Swan Estuary Reserves Action Group at **Milyu** Nature Reserve, South Perth. Second Monday of each month. Contact: Cathie 9339 2439 oneillc@westnet.com.au


Mondays

 **Plant learners' group** with **Eastern Hills Wildflower Society** meets twice a month in a self-learning environment to identify plants and expand knowledge. Contact: Pam eastern.hills.branch@wildflowersocietywa.org.au


Mondays

 **Propagation group** with **Eastern Hills Wildflower Society** meets twice a month to share knowledge about propagating native plants. Contact: Sandy eastern.hills.branch@wildflowersocietywa.org.au


Mondays, Wednesdays, Fridays 9am–12 noon

 **Bushcare activities** and wetlands walk trail maintenance with **Yanchep** National Park Volunteers. Contact: Ciara 9303 7771


Tuesdays 7am–9am

 **Bushcare activities** with Swan Estuary Reserves Action Group at **Alfred Cove** Nature Reserve each Tuesday. Contact: Margaret 9330 1791


Tuesdays 9am–11am and Saturday

 **Bushcare** with Friends of **Allen Park** every Tuesday and first Saturday of the month. Contact: Lesley 9384 7983 Judy 9383 1501, foapbg@gmail.com or facebook


Tuesdays and Thursdays, 8am–10am

 **Coastcare activities** with **Stirling** Natural Environment CoastCare (SNEC) resume 28 January 2020. Contact: Sheldon 0488 190 651 Rae 0419 191 710 website


Wednesdays

 **Seed cleaning group** with **Eastern Hills Wildflower Society** meets fortnightly to prepare seeds for propagation. Contact: June eastern.hills.branch@wildflowersocietywa.org.au


Wednesdays and Saturdays 7:30am–9:30am

 **Bushcare activities** with **Bicton** Environmental Action Group. Planting, weeding and foreshore clean-up. Various dates. Contact: Peter 0439 467 855 pneesham1@hotmail.com website

Thursdays 7:30am–9:30am and some Saturdays 8:30am–12 noon

 **Coastcare activities** with Friends of **Sorrento Beach** and **Marmion Foreshore** followed by morning tea. Contact: Mike 0438 710 527

Thursdays 8am–9am

 **Bushcare activities** every Thursday with **Byford** Enviro-Link. Contact: Kristy 9526 0199


Thursdays, Saturdays and Sundays 9am

 **Morning walks** with Friends of **Bold Park** Bushland Volunteer Guides. Various dates. Contact: 9480 3996 friendsbp@bgpa.wa.gov.au website

Thursdays and Sundays 10am–12 noon

 **Kanyana Wildlife** Centre, Discovery Centre **Tours**. Close encounters with native animals and interactive Discovery Centre. \$20 or less. Bookings essential. Contact: 9291 3900 info@kanyanawildlife.org.au website

Thursdays and Fridays 9am–4pm

 **Wetland, Bushcare** and **nursery** activities with The **Wetlands** Centre, **Cockburn**. Contact: Denise 0412 081 540 community@thewetlandscentre.org.au

Thursdays 7:30pm

 **Talks** with **Murdoch** Branch of the **Wildflower Society** to share passion and knowledge of nature. First Thursday each month. Cockburn Wetlands Education Centre. Contact: Christine 0468 676 933 murdoch.branch@wildflowersociety.org.au Facebook

Fridays 8am

 **Bushcare activities** at **Piney Lakes**. Volunteers need a site induction. Contact: Jacklyn.kelly@melville.wa.gov.au

Fridays and Sundays

 **Bushcare** with Friends of **Mosman Park** Bushland every Friday and the second Sunday of each month. Site determined the week before. Contact: mail@mosmanparkbushland.org


Fridays 7:30pm

 Talks with **Eastern Hills** Branch of the **Wildflower Society**. Fourth Friday each month, Octagonal Hall, 52 McGlew Rd, Glen Forrest. \$2 entry, visitors welcome. Contact: eastern.hills.branch@wildflowersocietywa.org.au Facebook website


Fridays and Saturdays 7pm–9pm

 First Friday and second Saturday every month, **Nocturnal Tours, Kanyana Wildlife** Centre. Meet nocturnal native wildlife and hear about endangered species breeding programs. \$20 or less. Bookings essential. Contact: 9291 3900 info@kanyanawildlife.org.au website

Check calendar

 **BirdLife** holds regular **talks** and **excursions** each month. View their calendar.

Check calendar

 **WA Naturalists** hold regular **excursions, photo groups** and **campouts** each month. View their calendar for the activities of the four branches.

Check calendar

 **Wildflower Society of WA** holds regular **talks**. View.

Activities Key



Hands on – bushland and wetland management activities.



Walks and tours – look, listen and enjoy guided walks and excursions



Skills development activities – talks, presentations, training courses and workshops.



Meetings and events – group meetings, expos, festivals and conferences.

January


3 Sunday 7:30am–10:30am

 **Birdwalk, Canning River Regional Park, Wilson.** Meet at the Kent Street Weir car park for a 5km guided walk. [BirdLife](#)

6 Wednesday 7:30am–11am

 **Birdwalk, Waterford Foreshore,** Salter Point. Meet at the Curtin University Boat Shed. [BirdLife](#)

8 Friday 7pm–8:30pm

 **Nocturnal Woylie Walk,** Woodland Reserve, **Whiteman Park.** [Bookings](#) \$20 adults, \$15 children/concession/students, family (2 adults + 2 children) \$60.


10 Sunday 7:30am–11am

 **Birdwalk, Waterford Foreshore,** Salter Point. Meet at the Curtin University Boat Shed. [BirdLife](#)


12 Tuesday and 13 Wednesday 6:30pm–8:30pm

 **Kids Nocturnal Woylie Walk** for the school holidays. Woodland Reserve, **Whiteman Park.** [Bookings](#) \$22 adults, \$18 children/concession, family (2 adults + 2 children) \$70.


15 Friday 7pm–8:30pm

 **Nocturnal Woylie Walk,** Woodland Reserve **Whiteman Park.** [Bookings](#) \$20 adults, \$15 children/concession/students, family (2 adults + 2 children) \$60.


17 Sunday 7:30am–11am

 **Birdwalk, Garvey Park,** Ascot. Meet at the car park next to the brown building on the left at the end of Fauntleroy Ave, off Great Eastern Hwy. [BirdLife](#)


19 Tuesday and 20 Wednesday 6:30pm–8:30pm

 **Kids Nocturnal Woylie Walk** for the school holidays. Woodland Reserve, **Whiteman Park.** [Bookings](#) \$22 adults, \$18 children/concession, family (2 adults + 2 children) \$70.


22 Friday 7pm–8:30pm

 **Nocturnal Woylie Walk,** Woodland Reserve, **Whiteman Park.** [Bookings](#) \$20 adults, \$15 children/concession/students, family (2 adults + 2 children) \$60.


23 Saturday 7:30am–11am

 **Birdwalk, Lake Richmond,** Rockingham. Meet on Safety Bay Road, Rockingham, opposite the Naragebup Environmental Centre on the western side of Lake Richmond. [BirdLife](#)

27 Wednesday 1–2pm

 **Community science and seadragon conservation:** a Meet the Museum [presentation](#) by Dr Nerida Wilson. Go behind-the-scenes of the WA Museum Boola Bardip and learn about SeadragonSearch, a research project that is identifying individual dragons from photos taken by community members using artificial intelligence, to help expand knowledge of wild seadragon populations. Entry is free but bookings are essential reception@museum.wa.gov.au 1300 134 081


29 Friday 7pm–8:30pm

 **Nocturnal Woylie Walk,** Woodland Reserve **Whiteman Park.** [Bookings](#) \$20 adults, \$15 children/concession/students, family (2 adults + 2 children) \$60.


30 Saturday 3:30pm–5:30pm

 **Planting Bush Tucker in your Garden** a workshop with horticulturist Janine Fielder at Zanthorrea Nursery, Maida Vale. Learn about Australian edible plants and how to look after them, with a practical demonstration on potting your own bush tucker plant to take home. [Tickets are free.](#)

30 Saturday 7:20pm


 **Night Walk at Booragoon Lake** led by Joe Tonga from Natsync Environmental. BYO torches and learn how to find nocturnal animals at night. [Tickets](#) \$20 for adults, children free (accompanied by an adult), with a discounted price of \$10 for Friends of Booragoon and Blue Gum Lakes.

31 Sunday 8:30am–4pm


 **Birdwalk, Yalgorup Lakes and Lake Preston.** Meet in the car park on the west side of the causeway on Preston Beach Road. Travel south from Perth on Forrest Highway for 120km then turn west into Preston Beach Road for 10km. Parking available on both sides of the road. BYO morning tea and lunch. [BirdLife](#)

February


7 Sunday 8am–11:30am

 **Birdwalk, Nambeelup Settling Ponds,** Nambeelup. Meet in the large cleared area on the north side of Lakes Road and just west of the Kwinana Freeway, there will be a carpool arrangement from there to the Nambeelup settlement ponds. Bookings essential as spaces are strictly limited. [BirdLife](#)

9 Tuesday 7:30am–11am

 **Birdwalk, Woodman Point,** Cockburn. Meet in the car park at Woodman Point on Jervoise Bay. [BirdLife](#)


11 Thursday 7:30pm–9:30pm

 **Taxonomy and the documentation of Australia's biodiversity,** a [talk](#) by Kevin Thiele (Director of Taxonomy Australia) will be held at the Armadale Field Study Centre. Entry \$3.

12 Friday 7pm–9:30pm

 **Everything Black Cockatoo,** a talk with speakers Sam Clarke of Karaakin Black Cockatoo Conservation Centre and Adam Peck of BirdLife Australia. For anyone with an interest in black cockatoos, conservation and rehabilitation of birds, or just birds in general. Held at Woodlupine Hall, Forrestfield. Entry with cash donations of \$5 for adults and \$1 for children (discounts available for WA Naturalists' Club Members). [RSVP.](#)


13 Saturday 7:30am–4:00pm

 **Birdwalk, Peel Inlet,** Mandurah. Meet north of the Erskine Lakes near the end of Southmead Green. [BirdLife](#)

21 Sunday 7:30am–11am

 **Birdwalk, Kogolup Lake,** Cockburn. Meet in the car park on Branch Circus. [BirdLife](#)

27 Saturday 7:30am–11am

 **Birdwalk, Yanchep National Park.** Meet at the Lakeview picnic area inside the park. Entry \$15 per vehicle or \$8 per vehicle for seniors. [BirdLife](#)



Go on a guided [Nocturnal Woylie Walk](#) at Woodland Reserve in Whiteman Park and see woylies and other fauna in action with special night lighting. Photo – Whiteman Park.



Take an evening [Moon Walk](#) with the Bibbulmun Track Foundation through mixed jarrah forest and enjoy a serene picnic by sunset. Photo – Bibbulmun Track Foundation.

March

7 Sunday 7:30am–11:30am

Birdwalk, Bibra Lake, Cockburn. Meet in the car park at the southern end of the lake off Progress Drive. [BirdLife](#)

12 Friday 7pm–9:30pm

Medicinal plants of the Perth Hills from a Noongar perspective, a talk by Marissa Verma as she shares her knowledge on how she uses medicinal plants to help promote health and healing. Held at Woodlupine Hall, 88 Hale Road, Forrestfield. Entry with cash donations of \$5 for adults and \$1 for children (discounts available for WA Naturalists' Club Members). Event to be confirmed with sufficient numbers attending. [RSVP](#).

13 Saturday 7:30am–11am

Birdwalk, Herdsman Lake, Stirling. Meet in the car park of the Perth Pony Club. [BirdLife](#)

18 Thursday 8:00am–11:30am

Birdwalk, Blackwall Reach, Bicton. Meet at the junction of Kent Street and Blackwall Reach Parade. [BirdLife](#)

20 Saturday 7:30am–11am

Birdwalk, Lake Gwelup, Stirling. Meet in the car park at the corner of Stoneman Street and Huntriss Road, north of Karrinyup Road. [BirdLife](#)

21 Sunday 3:30pm–6:45pm

Dr Dolittle Goes Bush Walk 2km to a Bibbulmun Track campsite to interact and learn about native animals from Kanyana Wildlife Rehabilitation Centre. Ideal for kids 5–12 years. \$20 for adults, \$40 for kids. [Bookings](#) close 20 March.

27 Saturday 8am–11:30am

Birdwalk, Wellard Wetlands, Baldivis. Meet at the entrance to Wellard Wetlands on the northern side of Bertenshaw Road, 1km from St Albans Road. [BirdLife](#)

27 Saturday 5:30pm–10pm

Moon Walk Casual 9km return guided walk with the Bibbulmun Track Foundation through mixed jarrah forest to a large granite outcrop for a BYO picnic by the setting sun and rising moon. Cost \$35. [Bookings](#) close 27 March.

Lotterywest Building Community Grants aims to enhance community connection as part of their COVID-19 Relief Fund, and includes a program stream focused on the environment. Now open, call 133 777 to discuss your grant proposal before [submitting an expression of interest](#).

Myer Foundation Sustainability and Environment Program large, multi-year grants to support core operations for organisations seeking to influence key stakeholders in taking action on climate change. Organisations that align with this focus area should [email](#) expressions of interest to the Program Manager.

Water Corporation partnerships, contact them to discuss environmental objectives for your area.

The Seedling Bank grants for purchasing seedlings as part of Planet Ark's National Tree Day activities. To apply, [log in](#) and add your application to your registered planting event (events year-round welcome to apply – not just for National Tree Day). Applications **close 19 February**.

Macpac Fund for Good Grants aims to help those committed to creating long-term change for the good of people and the planet, with [grants available](#) between \$2,000 and \$10,000. [Applications](#) open 1 February and **close 30 April**.

Coastwest 2021/22 provides grants of \$5,000–\$50,000 to support coastal land managers and community organisations to rehabilitate, restore and enhance the Western Australian coast. [Applications](#) are likely to **open end of January**.

The Ian Potter Foundation Sustainable – Environment Program supports ambitious and transformative environmental initiatives with grants of over \$100,000 to support on-ground conservation of natural environment projects. [Expressions of interest](#) open 29 March and **close 16 April**.

Lake Clifton Stewardship Grants of \$250–\$1,000 are available from the [Peel-Harvey Catchment Council](#), to assist Land for Wildlife members in the Lake Clifton Catchment in implementing eligible activities outlined in their Site Assessment Report. This can include revegetation, weed control, pest control and habitat augmentation. To apply contact Jordan Garbellini-Adams on 6369 8800 or by [email](#). Applications **close 30 November**.

Local government community grants These local governments provide small grants to their communities which fund environmental groups' management and restorations projects. Eligibility varies. [Armadale](#) opens 2 March, [Belmont](#) closes 26 February, [Broome](#) open year round, [Cambridge](#) opens January, [Canning](#) opens 11 February, [Cockburn](#) opens early February, [Fremantle](#) opens 1 March, [Kwinana](#) opens early 2021, [Melville](#) open year round, [Rockingham](#) open year round, [Subiaco](#) closes 30 March, [Swan](#) opens January.

Highlights



December – January

Be a part of the **Birds in Backyards Summer Survey** by spending 20 minutes counting the birds in your backyard, local park, school, or outdoor space and submit your survey data to [BirdLife Australia](#).

On now – 28 February National Shorebird Monitoring Program take part in the [annual survey of summer shorebirds](#). The ideal date to conduct a count is 15 January. [Email BirdLife](#) to be allocated a site.

On now – March

City of Cockburn **Turtle Trackers** [citizen science program](#) is seeking information about southwestern snake-necked turtles (*Chelodina colliei*), encouraging community members to report turtle sightings in support of scientific research. Volunteers are also needed to help protect turtles, nests and eggs during nesting season. Contact the City's Environmental Education Officer by phone (9411 3444) or [email](#).

On now – 31 August 9am–5pm

See stunning close-up photographs of native Western Australian flora by talented local photographers in the **Flowers in Focus amateur photography exhibition**. The exhibition is showcasing the best images from the 2020 Flowers in Focus photography competition, on display in Kings Park's outdoor gallery Long Vista.

2 January – 21 March 10am–4pm

Australian Geographic Nature Photographer of the Year 2020 exhibition showing at the Museum of the Great Southern, Albany. Witness the beauty of our natural world through photographs taken by professional, emerging and junior photographers. Free entry, donations welcome.

5–22 January

Nearer to Nature Sizzling Summer offers fun nature-based activities for the school holidays, with programs offered in diverse locations in the Perth metro area, the South West, and even the beautiful Valley of the Giants Tree Top Walk.

1–2 February

The 2021 **WA Wetland Management Conference** will celebrate an important milestone, with 2021 marking the 50th anniversary of the Ramsar Convention on Wetlands. The [conference](#) includes themes on wetland management and restoration, education, and policy. Field trips exploring the Ramsar-listed Peel-Yalgorup System wetlands will be held on Monday 1 February, with a conference day on Tuesday 2 February (World Wetlands Day) at the Mandurah Performing Arts Centre. For further details on registrations and fees, visit the [website](#) or [email](#) or phone (9417 8460) the conference organisers.

1–28 February

The **National Sustainable Living Festival, Melbourne** is a celebration of sustainability serving as a platform for showcasing community, commercial and technological responses to environmental challenges. It aims to push sustainable living into the mainstream by encouraging widespread awareness, support and action towards social and ecological sustainability. Visit the [website](#) for more information.

7 March

Clean Up Australia Day [Register a site](#) and get a group together to help clean up your local park, waterway, beach or bushland. Or [check](#) to see if there is a clean-up event already happening in your area – note that these may be happening on other dates and be sure to check details with the site supervisor beforehand.



Search the beach for washed-up organisms left behind by the waves and explore the intertidal zone with Beach Detectives, just one of the many fun activities available with Nearer to Nature's [summer school holiday program](#). Photo – Dom Lim Photography.

10–12 March

The **2020 National Landcare Conference** was [rescheduled](#) to 2021 due to COVID-19, and will be held at the International Convention Centre, Sydney.

19 March 8:30am–4pm

Hands Healing the Land, a [Community Science Conference](#) where land care practitioners, scientists and volunteers come together to share how they make a difference in caring for our unique flora and fauna, learn from traditional owners and build community. Keiran McNamara Conservation Science Centre, DBCA, Kensington. [Book your ticket](#) now (\$10–\$20, including catering). Get involved! We still have some slots available for guest speakers who would like to share their knowledge and passion. Please [contact](#) the conference organiser by 10 January 2021 to discuss this opportunity.



23–25 March

In Kings Park Education's **Noongar Boodja Six Seasons festivals school program**, students from Pre-Primary to Year 6 can learn about the Noongar six seasons, with local Aboriginal presenters sharing their cultural knowledge through fun and interactive activities. The 2021 program starts in March with Bunuru (second summer) and includes the Noongar Boodja Trail, wetlands and fishing, dance and storytelling. [Bookings](#) \$180–\$336 depending on class size.

28 March

The Great Cocky Count is an annual citizen science census and the biggest single survey of black cockatoos in Western Australia, monitoring Carnaby's cockatoos, Baudin's cockatoos, and forest red-tailed black cockatoos. Unfortunately the 2020 survey had to be cancelled due to COVID-19 restrictions, but with your help BirdLife is hoping to make 2021 the most comprehensive survey yet. [Register](#) from mid-January until March 7, or [email](#) now to go on BirdLife's Cocky Notes list to be notified when registrations open. Help BirdLife identify more roost sites by [reporting](#) any night-time roost sites you know about.

New publications

Bindi Saunders, Kirli, Dub Leffler. *Magabala Books*, 2020. \$16.99.

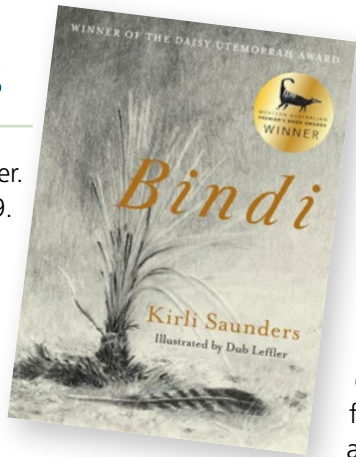
A verse novel for middle-upper primary students written from the point of view of 11-year-old Bindi and her friends on Gundungurra Country. Bindi isn't really into maths but loves art, hockey, and adventuring outside with friends or on her horse, Nell.

The new year starts as normal with school, family, hockey and dancing. But things don't go to plan – there's a big art assignment, a drought, a broken wrist and the biggest bushfires her town has ever seen! Written 'for those who plant trees', *Bindi* is an exploration of climate, bushfires, and healing.

Fire Country: How Indigenous Fire Management Could Help Save Australia

Steffensen, Victor. *Hardie Grant Travel*, 2020. \$29.99. An account from Indigenous land management expert Victor Steffensen on how reviving cultural burning practices could help restore our land. Indigenous knowledge has been developed over many generations on burning in a carefully considered manner, reading the country, and using fire as part of a wholistic approach to care for and heal the environment. There is

evidence that, if adopted, this knowledge could greatly benefit all Australians.



Fire effects on Soil Properties Pereira, Paulo, Jorge Mataix-Solera, Xavier Úbeda, Guillermo Rein, Artemi Cerdà (Editors). *CSIRO Publishing*, 2019. \$195. This book brings together research on the effects on fire on the physical, biological and chemical properties of soil from over 60 international experts. It deals with ash, smouldering fires, recurrent fires and management of fire-affected soil, giving examples from fire-prone areas of the world.

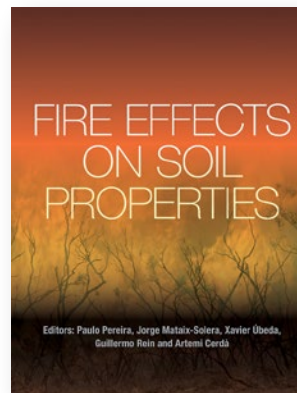
Current best practice

methods for research and monitoring of fires are described as well as new methodologies for future research.

Tawny Frogmouth (Second Edition)

Kaplan, Gisela. *CSIRO Publishing*, 2018. \$39.99. Representing the single most comprehensive study of tawny frogmouths, this book presents an easy-to-read account of

these unique nocturnal birds that are found throughout Australia. Learn all about tawny frogmouths: they are very affectionate and pair bond for life, can scream like a prowling tomcat, and defend their nest sites from reptilian predators by spraying them with pungent faeces! Widely appealing to bird lovers, amateur naturalists, or those with a scientific interest.



Recent Research

Cowan M, Blythman M, Angus J, Gibson L (2020) Post-Release Monitoring of Western Grey Kangaroos (*Macropus fuliginosus*) Relocated from an Urban Development Site [Animals](#) 10, 1914.

Kirchhoff C, Callaghan CT, Keith DA, Indiarto D, Taseski G, Ooi MKJ, Le Breton TD, Mesaglio T, Kingsford RT, Cornwell WK (2020) Rapidly mapping fire effects on biodiversity at a large-scale using citizen science [Science of The Total Environment](#) 755 (2), 142348.

Legge S, Woinarski JCZ, Dickman CR, Doherty TS, McGregor H, Murphy BP (2020) Cat ecology, impacts and management in Australia [Wildlife Research](#) 47, i-vi.

Main MT, Davis RA, Blake D, Mills H, Doherty TS (2020) Human impact overrides bioclimatic drivers of red fox home range size globally [Diversity and Distributions](#) 26, 1083–1092.

Makinson RO (2019) Myrtle Rust (*Austropuccinia psidii*) poses unprecedented challenges for plant conservation and recovery [Australasian Plant Conservation](#) 27 (4), 31–33.

McKemey MB, Patterson M, Banbai Rangers et al. (2019) Cross-Cultural Monitoring of a Cultural Keystone Species Informs Revival of Indigenous Burning of Country in South-Eastern Australia [Human Ecology](#) 47, 893–904.

Russell-Smith J, McCaw L, Leavesley A (2020) Adaptive prescribed burning in Australia for the early 21st century: context, status, challenges [International Journal of Wildland Fire](#) 29 (5), 305–313.

Saunders DA, Dawson R, Mawson PR, Nicholls AO (2020) Factors affecting nestling condition and timing of egg-laying in the endangered Carnaby's cockatoo, *Calyptorhynchus latirostris* [Pacific Conservation Biology](#) 26 (1), 22–34.

Thompson GG, Thompson SA, Bengsen A (2019) The value of camera traps in monitoring a feral-cat and fox reduction program. [Wildlife Research](#) 46, 599–609.

Wills AJ, Liddel G, Tunsell V (2020) Wildfire and fire mosaic effects on bird species richness and community composition in south-western [Australia Fire Ecology](#) 16, 5.

Apps

With the **ClimateClever Homes app** you can measure your carbon footprint, track emissions and see how you compare with others around the country. Find out how buildings and facilities consume resources and discover how to systematically reduce your carbon footprint and your utility bills. Then put things into action, set yourself deadlines, monitor your progress and share with the ClimateClever community to learn from each other's experiences. Free to download from the [App Store](#).

ShareWaste app connects people from apartment units with neighbours who compost, have worm farms or chooks. You can be a host and get more compost for your garden or become a donor to save your organic waste from ending up in landfill. Free to download from the [App Store](#) or [Google Play](#).

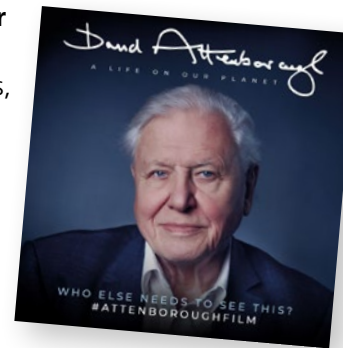
Spidentify app is an Australian spider identification assistant and field guide for mobile devices. High resolution photos accompany expert information on more than 250 species. The step-by-step identification tool will help you identify an unknown spider and provide a list of species that best match your description. Detailed information is given for each included spider, along with a bite danger rating. With supplementary content on spider anatomy, dispelling myths, and answers to commonly asked questions. Available for \$4.49 from the [App Store](#) or \$3.49 from [Google Play](#).



Website watch

The **Kings Park Festival Science Webinar** is available to watch [online](#), with talks on honeybees and native plants, seed spaghetti, plant cryopreservation, and fire regime effects on banksia woodland plant populations.

David Attenborough: A Life on Our Planet documentary film. Over his celebrated career spanning six decades, Sir David Attenborough has witnessed first-hand the scale of environmental damage caused by human actions. Now, he reflects on these changes and shares his witness statement for the natural world and vision for the future, revealing how together we can address the biggest challenges facing life on earth. Available to watch on [Netflix](#).



Improving biodiversity outcomes for Urban Forest Strategies through incorporating native tree species This [NatureLink Perth intern project](#) aims to help local governments choose the best native tree species to improve biodiversity outcomes by offering a simple five-step framework for improving tree selection. It provides tables of locally native tree species for the five Perth soil types, highlighting which trees are good for insects, bees, mammals and birds, and Carnaby's cockatoos. It also identifies information on fire, salinity and drought resistance and recommended spacing from buildings and utilities.

Pest Animal Management Glovebox Guides are available from [PestSmart](#) with guides available for managing wild dogs, foxes, feral pigs and rabbits. Access PDFs or order hard copies of the guides [online](#) (please note that printing and postage charges apply when ordering hard copies).

regenTV is the [YouTube channel](#) of the Australian Association of Bush Regenerators. Learn about ecological restoration in Australia and hear stories of inspiring environmental repair projects. Watch their recent videos on post-fire regeneration: [why assisting regeneration is so important](#), [how to minimise disturbance when walking and weeding](#), and [how to assess priorities for regeneration](#).

Perth NRM hosted a **Threatened Species Webinar** in August 2020, with presentations on the latest in threatened species research from around Australia. If you missed out, videos from the webinar are now available to watch [online](#).

Backyard Biodiversity in the Shire of Mundaring join Simon Cherriman in a [short video](#) on easy ways to support wildlife at home.

Tree Pictures: South-Western Australia website by Robert Powell to help you become more familiar of what healthy, well-developed specimens of Perth's local trees look like.

How to Save a Planet podcast asks the big questions: what do we need to do to solve the climate crisis, and how do we get it done?

Educated by Nature provides [learning experiences](#) in natural spaces across Perth to help children develop resilience, confidence, curiosity, physical skills, and a sense of connection to self, nature and community. Programs are available to families with toddlers and primary school aged children, schools, and other organisations.

The Australian Citizen Science Association's [online conference CitSciOzOnline](#) ran throughout October with themes on disaster response, innovation in citizen science, and connections and partnerships. Video recordings of all sessions are available to watch online if you missed out on watching it live.





tawny frogmouths

Photo – Amy Loffler.

By Simon Cherriman

Edited reprint with thanks from [iNSIGHT News](#)

The tawny frogmouth (*Podargus strigoides*), or 'Kambekor' in the Noongar language, is a well-known Australian night bird with an expertise for camouflage. Did you just read that scientific name, struggle to pronounce it, and wonder what it means?! Well, all animals are given two scientific names because they are sorted into families, genera and species according to their evolutionary relationships. The species name 'strig-oides' comes from this bird looking like an owl: 'strig' after the name of the owl family Strigidae, and 'oides' meaning 'like' or 'similar to'.

All this is very interesting because as you might have now guessed, tawny frogmouths are nightjars and NOT actually owls, although they are very similar to them: both have brown or grey plumage, large eyes, wings capable of flapping in silence, and are active at night. These similarities are the result of the birds facing similar environmental challenges, not because of a close relationship. But like owls, frogmouths hold a special aura of mystery, and to experience a 'penny-drop' moment when realising that 'branch' is actually a bird evokes great feelings of excitement!

The photo shown here was taken by Amy Loffler, who recently captured [more photos](#) of this wonderful tawny frogmouth family (with an additional fledgling!) near Herdsman Lake.

The presence of nocturnal predators is a good indicator of a healthy ecosystem, one that contains an assortment of small animals on which they feed. We are finally beginning to appreciate that such biodiversity is integral in sustaining a resilient environment that ultimately keeps us happy and healthy too.