

SIX SEASONS

Environment and Sustainability News from Shire of Mundaring

Calling all wildlife photographers!

The Shire's Environment team have been busy compiling information for a 'Wildlife of the Perth Hills' booklet to showcase our unique biodiversity and provide a handy reference to identify and understand local wildlife.

The booklet will feature common and some not-so-common wildlife, as well as fun facts about their habitats and where you might find them. Different kinds of native animals such as mammals, birds, reptiles, amphibians and invertebrates will be included.

An important aim of the booklet is to include great photographs! The Shire will be launching a 'Wildlife Photo Competition' to give keen locals the chance to have their photos published. To find out more or register your interest in the competition, please contact the Shire at environment@mundaring.wa.gov.au.



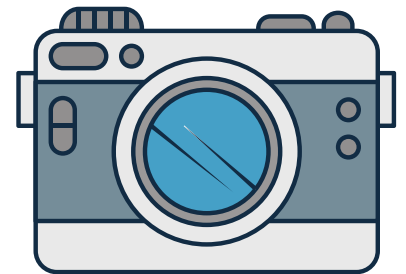
Spotted Jezebels are pollinators that live high in the canopy of large trees and seldom venture to lower parts of the garden. Image courtesy of Kayley Usher.

Shire of
MUNDARING

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**Don't miss your chance
to have your photo
published!**

If you have great photos of local wildlife, register your interest in our Wildlife Photo Competition!

Djeran - April to May

The Noongar seasonal calendar includes six different seasons in a yearly cycle. Djeran (ant season) brings cooler nights and dew in the early mornings. Banksia flowers start to blossom, providing nectar for mammals, birds and insects.



National Reconciliation Week 2023



DJERAN



BUNURU



KAMBARANG



DJILBA

The Six Seasons designs featuring native plants and animals were created by Aboriginal artist Tyrown Waigana

National Reconciliation Week (Saturday May 27 to Saturday June 3) is a time for Australians to learn about our shared histories, cultures, and achievements, and to explore how each of us can contribute to achieving reconciliation in Australia.

The theme for National Reconciliation Week 2023, Be a Voice for Generations, encourages Australians to be a voice for reconciliation in tangible ways in our everyday lives – where we live, work and socialise.

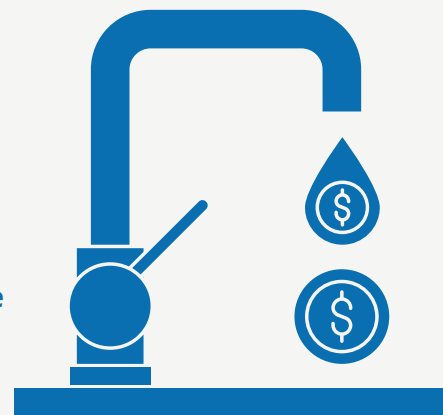
Each Six Seasons Newsletter features artwork by Aboriginal artist Tyrown Waigana, whose background can be traced to Wandandi Noongar people from south-west Western Australia and Ait Koedal people from Saibai Island in the Torres Strait.

Traditionally Noongar people hunted and gathered food according to the seasons, being guided by the signs in nature as to which animal and plant resources were plentiful at those times.

Tyrown's eye-catching illustrations depict the six Noongar seasons including Birak (Dec to Jan), Bunuru (Feb to Mar), Djeran (Apr to May), Makuru (Jun to Jul), Djilba (Aug to Sep) and Kambarang (Oct to Nov).

Five easy ways to save on water heating bills

With cooler days and nights approaching, now is a good time to think about ways to slash home energy bills and cut greenhouse emissions.



Did you know water heating is the second largest user (21%) of household energy, after house heating and cooling? Over half of all hot water use is in the bathroom, one third in the laundry, and the rest in the kitchen.

Here's five easy ways to help you to save money on your water heating bill:

- 1. Check the thermostat on your hot water system** - instantaneous and continuous flow systems should be set at 50 degrees celsius while storage and solar systems set at 60 degrees celsius for maximum efficiency and safety.
- 2. Take shorter showers** - reducing your shower time by four minutes could save \$85 per year! Set a time on your mobile phone to prompt you.
- 3. Wait until the sink is more full** - instead of washing up lots of small loads of dishes, wait until you have a full sink load before you wash! This will save time as well as money (who wants to stand around the kitchen sink any more than necessary?).
- 4. Wash clothes in cold water** - washing your clothes in hot water can use 10 times more energy than a cold wash! Save the hot wash for when you really need it for those extra grimy items! Clothes can also last a lot longer when washed in cold water - another bonus!
- 5. Choose an energy efficient hot water system** - if you're purchasing a new hot water system consider the energy efficiency rating. Solar hot water systems and heat pump systems are an efficient way to heat water while reducing bills and greenhouse gas emissions.

Does Dieback affect Quenda?

This is the question Murdoch PhD candidate Tom Mansfield would like to answer. Tom is undertaking important research to help investigate how *Phytophthora Dieback* might be affecting one of our most beloved backyard visitors.

Phytophthora Dieback ('Dieback') is an introduced water mould that lives in soil and plant tissue. The pathogen kills susceptible vegetation by causing root rot and stopping the transfer of water and nutrients throughout the plant.

While much research has gone into understanding the susceptibility of native plants to Dieback, less is known about the impact on animals that live in or near Dieback infested areas. It's reasonable to suspect that loss of native plants from Dieback could result in less habitat and food available for wildlife.

These impacts may also be intensified in urban and peri-urban areas where habitat fragmentation is already an issue for many animals. However, some animals may be more resilient to changes, and the severity of Dieback infestations can vary greatly depending on the local landscape conditions and plant communities.

Tom's research is being conducted in a number of Dieback affected reserves in the Shire. It attempts to answer the following questions:

- Is Quenda habitat reduced in Dieback infested bushland? The shrubby understorey that Quendas prefer may be affected by Dieback. For example, Dieback susceptible grasstrees (*Xanthorrhoea preissii*), provide important habitat for Quenda seeking shelter in their thick 'skirts'
- Are Quendas foraging less in Dieback infested bushland? Quendas are digging mammals, and regularly dig shallow pits to search for underground truffles, tubers, and invertebrates. Less Quenda digging pits may indicate there's less food available in Dieback infested areas

Tom's research has been supported by the State NRM Community Stewardship Grants Program, Shire of Mundaring and Murdoch University.



What has been discovered so far?

To answer his two questions, Tom compared Dieback infested bushland to un-infested bushland. He assessed factors such as native plant ground cover, density and health of grasstrees, number of Quenda diggings as well as collecting samples of truffles (a favourite food for Quendas!).

While results are preliminary, Tom has discovered that in bushland infested with Dieback:

- Dense shrub cover and grasstrees that could provide Quenda habitat (those with large skirts to the ground) was almost halved compared to un-infested bushland. This results in more bare ground and less habitat for Quenda
- Quenda foraging activities was a third lower compared to uninfested bushland, although no change to truffle numbers were observed (but there may be reduction in other food sources)

These results indicate that there is considerably less Quenda habitat in infested areas compared to un-infested areas. The data from Tom's research will provide an important contribution to a better understanding of impacts on Quenda habitat and what management actions within Dieback infested bushland can better support these animals.

In the meantime, we can support Quenda and other local wildlife by planting attractive, fauna-friendly gardens that provide their preferred sources of food and shelter. For great ideas on creating a fauna friendly garden visit www.rewildperth.com.au

Property Paradise Proves Popular



Landholder Tom Farmer and presenter Chris Ferreira (right)

Landholders learning how to transform their land into a property paradise!

Over 70 landholders joined award winning landcare and sustainability expert Chris Ferreira for a fun and informative workshop to learn how to transform their land into a property paradise!

Participants learned the importance of preparing a step-by-step approach to property improvement, including how to divide the property into units that make it easier to manage.

Topics such as how to plan and prioritise on-ground work, improving soil health, tackling weeds, growing pasture, revegetation, fencing and reducing fire risk were covered.

Afterwards, participants networked over a delicious lunch. Many have already signed up for the half day Property Planning Course that will provide more detailed, one-on-one advice that will help them get started and stay on track! The event was supported by Perth NRM, Shire of Mundaring and hosted by City of Kalamunda.

Landcare Calendar - Tips for Djeran



- Prepare for planting and revegetation by undertaking weed control where you are planning to establish native plants. You may need to do this more than once if weeds re-appear after more rain
- For great tips on preparing the soil for planting, watch our 'Planting for Success' video, presented by landscape architect and radio personality Sue McDougall at www.mundaring.wa.gov.au

Six Seasons has been prepared by the Environment and Sustainability team at Shire of Mundaring. To subscribe email the team at environment@mundaring.wa.gov.au

Property Planning Course

Saturday 29 April, 9.30am to 2.30pm

Civic Room, Shire of Mundaring

Cost \$20 per property (including lunch and a laminated A3 aerial photo)

The course is open to landholders on rural residential and rural zoned land in the Shire of Mundaring. Landcare expert Chris Ferreira and Shire staff show you how to more easily manage your property. You'll come away with a detailed property plan and step by step instructions on what to do, how and when! To register visit www.eventbrite.com.au and search for 'Property Planning Course.'

Red Hill Waste Facility Tour

Saturday 20 May, 9am to 12pm

Bus departs from Forrestfield Primary School and Mundaring Shire Admin

This tour is free for Shire residents. Learn how the Red Hill Waste Facility diverts waste from landfill - from the tip face to the food organics and garden organics (FOGO) recovery system and more! To register visit Eventbrite and search for 'Red Hill Waste Management Facility Tour.'

The Helena River Showcase

Sun 30 April, 10.30am to 3pm

Boya Community Centre

An opportunity for people with properties adjoining the Helena River to meet Traditional Owners and other community members who are looking after the river. Bring along any weeds you want identified and learn what you can do to improve the health of your land and the river. To find out more and to register contact Liz Kington at liz.kington@iinet.net.au.

Seedlings Handout Weekend

Sat 27 and Sun 28 May, 9 - 3pm

Shire of Mundaring Depot

Seedlings will be available for collection on Saturday and Sunday. Applicants will be informed of their allocated collection day. Please remember to bring a box (or boxes) to place your seedlings in when you arrive. For more information, please contact the Seedlings Coordinator at seedlings@mundaring.wa.gov.au.