



Search ...

Go!

Go to whole of WA Government search (<http://wa.gov.au/search/>).

You are here: [Home \(/\)](#) / [About us \(/about-us\)](#) / [Science & research \(/about-us/science-and-research\)](#) / [Animal conservation research \(/about-us/science-and-research/animal-conservation-research\)](#) /
Upper Warren

Upper Warren - home of threatened fauna

Published: 21 November 2018



The Upper Warren region is one of Australia’s most important areas for native mammal conservation.

The region is about 300km south of Perth, nestled between Manjimup, Bridgetown, Boyup Brook and Lake Muir, and includes 140,000 hectares of native bushland managed by DBCA. The region includes much of the upper water catchments of the Warren River - hence the name Upper Warren.



Numbat (*Myrmecobius fasciatus*)

It is home to at least 27 native species of mammals including 15 marsupials, nine bats, two rodents and one monotreme. The diversity and abundance of marsupials makes it the largest remaining stronghold for a range of threatened species including woylies, numbats and western ringtail possums.

The Upper Warren region is also important for native plant biodiversity with about 1000 vascular plants, 500 non-vascular plants and hundreds of macrofungi recorded in the area. This includes at least seven threatened and conservation-priority plant species.

The region is important to the traditional Kaneang, Minang and Pibelmen indigenous groups and has Aboriginal sites of mythological, ceremonial, cultural and spiritual significance. There are also non-Indigenous sites of interest associated with early settlement. Agricultural and forestry industries remain important in and around the region.

Introduced animals threaten native mammals

Introduced animals such as feral cats and foxes are the major threats to many of the region’s native mammals. Work by DBCA to protect these mammals includes the South West Threatened Fauna Recovery Project (with funding from the Australian Government’s National Landcare Program), [Woylie Conservation Research Project \(/about-us/science-and-research/animal-conservation-research/262-woylie-conservation-and-research\)](#) and introduced predator control as part of [Western Shield \(/management/pests-diseases/westernshield\)](#). More information is available in the following research paper, [Recoveries and cascading declines of native mammals associated with control of an introduced predator \(https://academic.oup.com/jmammal/article/98/2/489/3064949\)](#) .

Priority native mammals of the Upper Warren



Woylie, *Bettongia penicillata*. Conservation status (WA): Critically Endangered



‘Fast and fiesty’ when cornered, woylies use their incredible speed to escape from danger, such as predators, whenever they can. Underground truffles from native fungi that have important symbiotic relationships with plants are a major part of the woylie’s diet. Their extensive digging for their prized food and their role in spreading the spores and seeds of native fungi and plants make them important ‘ecosystem engineers’ needed to

Menu

- [About Parks and Wildlife \(/about-us\)](#)
- [Annual report, yearbook and performance highlights \(/about-us/annual-report-and-yearbook\)](#)
- [Science & research \(/about-us/science-and-research\)](#)
 - [Biological surveys \(/about-us/science-and-research/biological-surveys\)](#)
 - [Animal conservation research \(/about-us/science-and-research/animal-conservation-research\)](#)
 - [Plant conservation research \(/about-us/science-and-research/plant-conservation-research\)](#)
 - [Landscape conservation research \(/about-us/science-and-research/landscape-conservation-research\)](#)
 - [Ecoinformatics research \(/about-us/science-and-research/ecoinformatics-research\)](#)
 - [Publications & resources](#)

improve the health and resilience of the ecosystems in which they live. Woylies collect bark and leaves in their tails to make exquisite and well-hidden nests in low lying shrubs.

Previously found across most of mainland Australia, the largest and genetically most diverse of the two remaining natural populations lives in the Upper Warren region.


Read more about [woylies \(/about-us/science-and-research/animal-conservation-research/262-woylie-conservation-and-research\)](#) or download a  [fauna profile 947.65 KB \(/images/documents/plants-animals/animals/animal_profiles/woylie_faur](#) and  [fauna facts 480.31 KB \(/images/documents/plants-animals/animals/animal_profiles/woylie_faur](#)



Ngwayir (western ringtail possum), *Pseudocheirus occidentalis*. Conservation status (WA): Critically Endangered

‘Living on the edge’ - ngwayir, at around 1kg in size, push the biological boundaries by being as small as they can be to be able to fit in the incredibly long digestive tract needed to be able to eke out as much nutrition as possible from their specialist foliavore (leaf-eating) diet that relies on a few native plant species such as peppermint trees, jarrah, and some melaleucas. Some more nutritious exotic plants in people’s gardens can provide a viable alternative for ngwayir in rural and urban environments. Large hollow-bearing trees and interconnected tree canopies in the more productive (moist and fertile) and least disturbed forests are particularly important habitat for the ngwayir in the Upper Warren.

Previously found in south-western Australia between Geraldton and nearly as far as the WA/SA border on the south coast, ngwayir are now restricted south of Mandurah on the west coast and just east of Albany on the south coast. The Upper Warren and area around Manjimup supports the largest remaining inland population of ngwayir and much of the remaining genetic diversity.

Read more about [ngwayir \(/plants-and-animals/threatened-species-and-communities/threatened-animals/351-western-ringtail-possums\)](#), [\(/plants-and-animals/threatened-species-and-communities/threatened-animals/western-ringtail-possums\)](#) download the  [fauna profile 1.06 MB \(/images/documents/plants-animals/animals/animal_profiles/western_rin](#) or view a [research paper on ngwayir habitat preferences in the Upper Warren \(https://www.sciencedirect.com/science/art via=ihub\)](#) .



Numbat, *Myrmecobius fasciatus*. Conservation status (WA): Endangered


Australia’s ‘day tripper’, the iconic numbat is the only truly diurnal marsupial; making the most of those times of the day when termites, their staple diet, are active. In winter and cold nights numbats go into torpor to save as much energy as possible until conditions for finding their food improve. A truly unique Australian marsupial, it is believed to be the closest living relative of the extinct thylacine.

[\(/about-us/science-and-research/publications-resources\)](#)

- [Wetlands conservation research \(/about-us/science-and-research/wetlands-conservation-research\)](#)
- [Marine conservation research \(/about-us/science-and-research/marine-research\)](#)

[Contact us \(/about-us/contact-us\)](#)


Previously found across much of southern Australia, the largest of the two remaining natural populations lives in the Upper Warren region.

Download the  [numbat fauna profile 886.75 KB \(/images/documents/plants-animals/animals/animal_profiles/numbat_fa](#)



Chuditch, *Dasyurus geoffroii*. Conservation status (WA): Vulnerable

The ‘ultimate meat-lover’, the chuditch is WA’s largest surviving carnivorous marsupial. It’s distinctive white spots and running gait sets this species apart from all others. While generally found on the ground, they are also good climbers. They feed on vertebrates, invertebrates and some fruits and flowers. Their day-time dens are usually in hollows in logs, trees and rocky outcrops and burrows. One of the largest known populations in the south-west lives in the Upper Warren region.



Download the  [chuditch fauna profile 831.50 KB \(/images/documents/plants-animals/animals/animal_profiles/chuditch_fa](#)



Quenda (southern brown bandicoot), *Isodon fusciventor*. Conservation status (WA): Priority 4: Rare, near threatened and other species in need of monitoring

‘Stocky digger’ - With a pointy snout and strong stocky limbs, the quenda are great diggers. The omnivorous diet includes seeds, fungi, insects and plant roots. They can breed most of the year when conditions are good. The quenda mother’s milk is one of the richest in the mammal world, enabling their golden-furred young (up to six per litter) to grow rapidly and mature in just 2 to 3 months.

Having initially increased strongly in response to fox baiting, quenda are not as abundant in the Upper Warren they were in the 1990s. The high abundance of other native mammals make it difficult to estimate numbers using traditional cage trapping methods.

Download quenda  [fauna notes 786.71 KB \(/images/documents/plants-animals/animals/living-with-wildlife/quenda_fauna_note_2018.pdf\)](#) and  [fauna facts 535.89 KB \(/images/documents/plants-animals/animals/animal_profiles/quenda_fau](#)



Wambenger (brush-tailed phascogale), *Phascogale tapoatafa wambenger*. Conservation status (WA): Conservation dependent

‘Tap-dancing acrobat’ - these squirrel-like athletes are very agile and active and boast one of the most flexible ankle joints in the mammal world (they can nearly rotate a remarkable 180 degrees), which makes them well suited for their life in the trees. Wambenger tap their toes on the bark and wood of trees when alarmed to warn their predators that they have been spotted. Wambenger mostly eat insects but may also feast on some flowers and nectar. After the winter breeding, all males die, making the ultimate sacrifice to allow more food to be available to the mothers and their young. Wambenger create well insulated nests in small tree hollows and cavities.



Tammar wallaby, *Notamacropus eugenii*. Conservation status (WA): Priority 4: Rare, near threatened and other species in need of monitoring

‘Amazing astronomer’ - the tammar females synchronise their pregnancies with the summer solstice and are only one of only two macropdid species that have a strictly seasonal breeding. Being a relatively small wallaby (less than 10kg) they are particularly vulnerable to fox and feral cat predation. Dense *Melaleuca* and *Gastrolobium* thickets are especially important because they provide protection from predators. Tammar wallabies venture out from the safety of these thickets to feed on grasses in more open areas nearby. But in areas where fox control is effective, Tammars can be found more widely across the landscape. Their shy, secretive habits and their grizzled grey-brown coat with rufous neck, shoulders and limbs make the tammar a real treat to see in the bush. One of the largest known populations in the south-west lives in the Upper Warren region.



Western brush wallaby, *Notamacropus irma*. Conservation status (WA): Priority 4: Rare, near threatened and other species in need of monitoring


Enigmatic forest-dweller - A particularly attractive and shy species endemic to the south-west of WA. Unlike many macropods, this species is typically solitary or found in pairs. It is a large grazer and browser occupying a wide range of open forest and woodland habitats, preferring areas with modest densities of ground cover. It generally avoids open pasture areas. It is most active around dawn and dusk but may be active throughout the day in the cooler months. It is an agile and speedy animal, but it is prone to car-strike when disturbed during the day.



Quokka, *Setonix brachyurus*. Conservation status (WA): Vulnerable

‘Tall, dark and handsome’ - While their island cousins are ‘selfie-superstars’, the mainland quokkas are typically larger, darker and arguably even more handsome but more shy and secretive. Browsing on various plants, the quokka depends on moderately thick vegetation to provide protection from introduced predators. Thick creek lines and riparian areas provide important refuges and corridors for movement.

A rare treat but becoming more common in the southern parts of the Upper Warren, as effective introduced predator control enables their numbers further south in the higher rainfall jarrah and karri forests to recover and recolonise areas further afield.


Download the  [quokka fauna profile 869.91 KB \(/images/documents/plants-animals/animals/animal_profiles/quokka_fau](#)



Rakali (water rat), *Hydromys chrysogaster*. Conservation status (WA): Priority 4: Rare, near threatened and other species in need of monitoring

‘Graceful swimmer’ - these secretive water nymphs have dense lustrous fur, a distinctive white tip to their tail and webbed feet. Rakali are found around larger bodies of permanent water such as rivers, wetlands and dams. Rakali are opportunistic hunters

and scavengers of aquatic and land animals, typically taking their quarry back to a favourite feeding site, which are usually near water and where the remains of past meals can be seen. Their dens are found in tunnels in the banks or hollow logs beside the water. There are no recent records of rakali in the Upper Warren but they are expected to still be present.

Download  [rakali fauna facts 484.38 KB](#)
([/images/documents/plants-animals/animals/animal_profiles/rakali_fauna](#)



All species illustrations by Jodie Quinn.

Contact

For more information contact the Parks and Wildlife Service [Donnelly District](#) ([/component/contact/contact/8](#)).

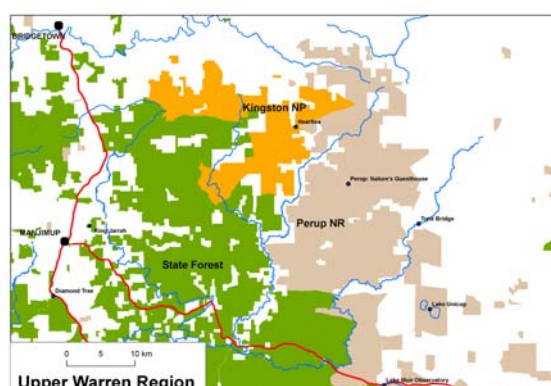
If you would like to report the sighting of a threatened mammal species, please visit our [threatened animals page](#) ([/plants-and-animals/threatened-species-and-communities/threatened-animals](#)).

More information

- Download our Landscape magazine articles (will download as PDF) [The jewel in the crown: Perup and the Upper Warren \(981.24 KB\)](#)
([/images/documents/about/science/projects/upper_warren/Landscape_the%20jewel%20in%20the%20crown.pdf](#)), [Perup Sanctuary: insuring woylies against extinction \(624.75 KB\)](#)
([/images/documents/about/science/projects/upper_warren/Landscape_perup%20sanctuary.pdf](#)) and [Down but not out: solving the mystery of the woylie population crash \(673.10 KB\)](#)
([/images/documents/about/science/projects/upper_warren/Landscape_down%20but%20not%20out.pdf](#))
- Download the  [Perup Management Plan 2012 4.35 MB](#)
([/images/documents/parks/management-plans/dearchive/perupmanagementplan_web.pdf](#))
- Find out about [Tone-Perup Nature Reserve](#) (<https://parks.dpaw.wa.gov.au/park/tone-perup>), including accommodation at [Perup Nature's Guest House](#) (<https://www.perupnaturesguesthouse.com.au/>).
- Download the  [Perup Sanctuary 747.18 KB](#)
([/images/20140607_Perup_Sanctuary_brochure_REVISED_JUN2014_v2.pdf](#)) brochure



Upper Warren region location map ([download as PDF 1.14 MB](#)
([/images/documents/about/science/projects/upper_warren/Upper%20](#)



Upper Warren region area map ([download as PDF 390.84 KB](#)
([/images/documents/about/science/projects/upper_warren/Upper%20](#)

Popular links

[Minister for Environment](#)
(<https://www.dpaw.wa.gov.au/media/dpaw?task=weblink.go&id=3>)
[Park passes](#)
(<https://shop.dpaw.wa.gov.au/park-passes>)
[For visitors](#)
(<http://parks.dpaw.wa.gov.au/>)

Contacts

[Media](#) (/about-us/contact-us/media)
[Feedback](#) (/about-us/contact-us/feedback)
[Parks and Wildlife offices](#) (/about-us/contact-us/locations)

✉ eNewsletter

Subscribe to our mailing list

Email

Subscribe



(<https://twitter.com/WAParksWildlife>)



(<https://www.facebook.com/WAParksWildlife/>)



(<https://www.instagram.com/waparkswildlife/>)



(<https://www.youtube.com/user/ParksAndWildlife>)

Select Language ▼