

# Our nationally important rural catchments

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South East Queensland (SEQ) is home to thousands of plants and animals, a diverse landscape of forests, grasslands, wetlands and coastal areas of outstanding cultural and environmental value.

Many of our natural wonders lie near our coastal areas, however our rural catchments in SEQ are just as special. Rich and diverse, they are home to beautiful bushland, national parks, vibrant communities and a strong agricultural industry.

Some of these areas are considered nationally important, known formally as 'matters of national environmental significance'. This means that they are protected under Commonwealth legislation\*.

In our rural catchments these areas include habitats for nationally threatened plants and animals such as Stream Clematis and Black-breasted Button-quail as well as four nationally threatened ecological communities

Other significant areas include the Gondwana Rainforests of Australia World Heritage Area, internationally recognised for its outstanding natural values. This World Heritage Area traverses the southern boundary adjoining New South Wales. Many of the waterways that start in the World Heritage Area form the headwaters for our internationally significant wetland, Moreton Bay (known as a Ramsar wetland).

**An ecological community is a group of plants and animals that interact with each other in a given location.**



## Looking after our region through strong partnerships

For 22+ years, and in partnership with local communities and landholders, Healthy Land and Water has been taking action to conserve nationally important areas, plants and animals.

This includes supporting actions in rural SEQ to:

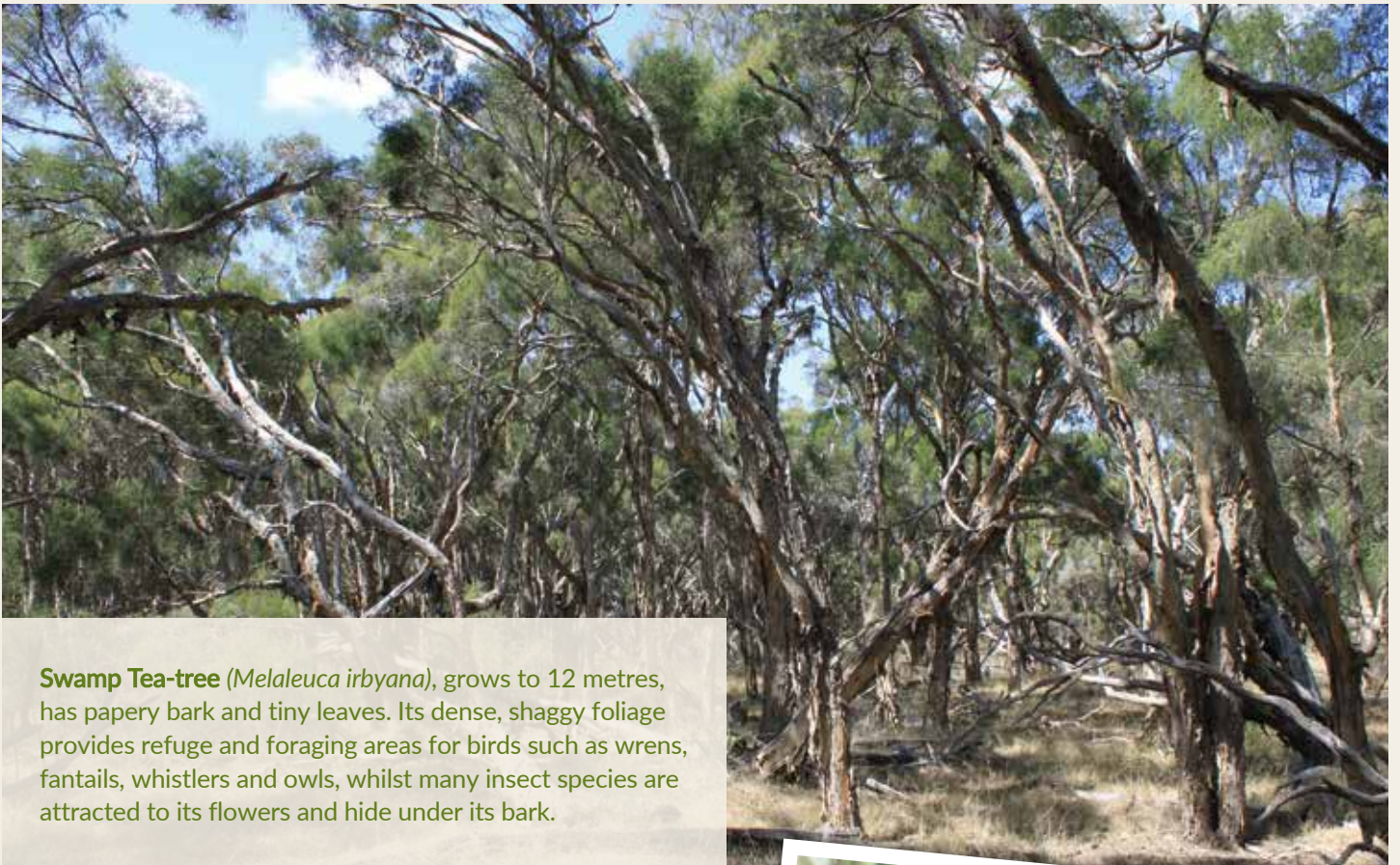
- restore the condition of forests and woodlands and species habitats by:
  - increasing their area and connecting them to each other through regrowth management and planting
  - managing ongoing threats from fire, livestock, weeds and feral animals
- improve our knowledge and understanding of these areas through research, workshops and community information.

**If you are interested in finding out more or partnering with us to continue or expand current actions, we would love to hear from you.**

\* Commonwealth Environment Protection and Biodiversity Conservation Act 1999



# Nationally important ecological communities in the rural catchments of South East Queensland



**Swamp Tea-tree (*Melaleuca irbyana*)**, grows to 12 metres, has papery bark and tiny leaves. Its dense, shaggy foliage provides refuge and foraging areas for birds such as wrens, fantails, whistlers and owls, whilst many insect species are attracted to its flowers and hide under its bark.

## Swamp Tea-tree Forest of South East Queensland

Swamp Tea-tree Forest is unique to SEQ, only found growing in our region. Unfortunately, over 90% of its original extent has been cleared for housing, agriculture and infrastructure. This Forest is typified by the presence of Swamp Tea-tree (*Melaleuca irbyana*) and is found on slowly-draining clay soils from Jimboomba to Toogoolawah in a variety of forms, from scattered to dense thickets of Swamp Tea-tree growing under taller eucalypts which are sparsely distributed, well-spaced or even quite thick.

Under the trees grow a diversity of native grasses, flowers and herbs, valuable to wildlife and livestock. Fire and livestock, and the possibility of further clearing, continue to threaten this community.



Some eucalypts in Swamp Tea-tree Forest are preferred food trees for the **Koala** (*Phascolarctos cinereus*) and Swamp Tea-tree is also used as for shelter, providing refuge from the sun and disturbance. The Koala is threatened due to habitat loss, dogs, cars and disease.

*Photo by Deborah Metters.*







Brigalow Forest, Photo by Margaret Donald, licensed under Creative Commons 2.0 <https://flic.kr/p/dbZwNV>

## Brigalow Forest

Brigalow Forest is typified by the presence of Brigalow (*Acacia harpophylla*), growing either in an open forest with other trees such as Belah (*Casuarina cristata*) and with grasses underneath, or mixed with vine thickets in gullies and along south-facing slopes.

Less than 10% of the former extent of Brigalow Forest remains and SEQ is the eastern limit of a distribution that extends in a broad band from Townsville to Dubbo. The small remnants left in SEQ occur in the Fassifern, Rosewood, southern Lockyer and Cooyar areas, and are isolated from each other, often weed-infested and vulnerable to fire, livestock, pest animals and further weed invasion.

The **Glossy Black-cockatoo** (*Calyptorhynchus lathami*) is not nationally threatened but relies on she-oaks such as Belah that grow in threatened Brigalow Forest. This charismatic bird attracts much community interest due to its fussy feeding habits and its need for large hollows as nest sites, found only in big, old trees. Male birds are fairly plain, whilst females have yellow spots and blotches on their heads and necks in unique patterns which distinguish one female from another. *Photo by Sheena Gillman.*



The **Collared Delma** (*Delma torquata*) is Australia's smallest legless lizard, growing to only 19cm. Its body is grey to brown and its black head has four yellow stripes. This lizard doesn't move very far, usually staying in a very small area with rocks which can be used for shelter. *Photo by Mervyn Mason.*



## Gondwana Rainforests of Australia World Heritage Area

World Heritage Areas are also of national importance. Gondwana Rainforests contains the most extensive area of subtropical rainforest in the world, with many plants and animals that have remained relatively unchanged for thousands of years.

Since 2006, **Healthy Land and Water** has instigated a series of projects addressing conservation of World Heritage Area values, including development of the Border Ranges Rainforest Biodiversity Management Plan, fire planning and management in the upper Teviot, Yamahra Creek and Tarome areas, and threatened species habitat protection and restoration in the Kerry Valley and upper Teviot, Christmas and Running Creek catchments.





### Lowland Rainforest of Subtropical Australia

This subtropical rainforest is usually tall and features vertical layers of many tree species, including figs, hoop pine, lilly pilly and brush box, some of which rise high above the other trees.

The tree branches and leaves greatly overlap each other, creating a dark, protected environment beneath them for tangled vines, lush ferns and palms. This is an incredibly diverse community with hundreds of plant and animal species, many of which are threatened species.

Over 90% of the original extent of this rainforest has been cleared for housing, agriculture and infrastructure. It is usually found in low-lying areas of eastern Australia, away from the coast, that receive a high annual rainfall. In rural SEQ, the upper Stanley River and upper Logan River catchments contain fragments of this rainforest.



The **Grey-headed Flying-fox** (*Pteropus poliocephalus*) is one of the largest bats in the world! A wingspan of over one metre allows them to travel hundreds of kilometres in just a few days. Flying-foxes are critical to the distribution of large-seeded rainforest plants and the pollination of eucalypts. Populations are estimated to have been reduced by 80% through culling and destruction of roosting and foraging habitats.

*Photo by Deb Melville.*

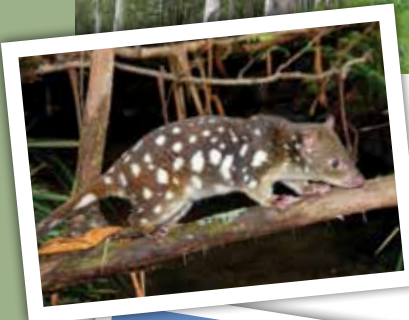
The **Giant Barred-frog** (*Mixophyes iteratus*) is the second largest frog in Australia. It has banded legs, a golden eye and a distinctive guttural call. It is found along shallow rocky streams in rainforest and wet sclerophyll forest (and persists in farmland adjoining these areas), and also deep, slow moving lowland streams with steep banks. Local extinctions due to habitat loss and disease have caused this beautiful large frog to become threatened.

*Photo by Bruce Thompson.*



### Box-Gum Grassy Woodland and Derived Grassland

This community is hard to find in SEQ but does occur within other forest types on the upper slopes and ranges of our rural catchments. In SEQ this community is dominated by Yellow Box (*Eucalyptus melliodora*) or White Box (*Eucalyptus alba*), beneath which there is usually a rich diversity of native grasses, shrubs and herbs. Only 10% of the original extent of this community remains and half of this is badly degraded; in some areas, harvesting of box gum and other trees has left only grassland remaining.



Recognisable by the abundant white spots on its body and tail, the very agile, cat-like **Spotted-tailed Quoll** (*Dasyurus maculatus maculatus*) is Australia's largest mainland marsupial carnivore. Its sharp teeth make short work of possums, other small mammals, birds and various other prey. Quolls need large areas of mixed forest to provide sufficient food and den sites; habitat loss and degradation have led to the demise of the Quoll throughout much of its range. *Photo by Wildlife Queensland*

The **Red Goshawk** (*Erythrotriorchis radiatus*) is large and powerful, but also solitary and secretive. Extremely large territories mean Red Goshawk is sparsely distributed and hard to find. Whilst recent surveys failed to find any in SEQ, it is thought they may still persist in the rural catchments, possibly nesting in the forested hills and travelling to lowland areas during winter. We urge you to keep your eyes open for these birds and their nests. *Photo by James Watson.*



# Threatened Plants and Animals

SEQ's rural catchments contain over 80 nationally threatened plants and animals, too many to include in this factsheet, but here are a few of special interest. If you are interested in learning about more about these or the others, please visit [www.environment.gov.au](http://www.environment.gov.au).



The distinctive star-like seed pod of female **Stream Clematis** (*Clematis fawcettii*) plants helps with its identification. This scrambling vine grows in dry rainforests and semi-evergreen vine thickets across the rural catchments of SEQ. Habitat clearing and fire have reduced its population and distribution.

*Photo by Glenn Leiper.*



The vulnerable **Brush-tailed Rock-wallaby** (*Petrogale penicillata*) is highly agile and found in and around rugged, rocky areas which provide shelter and some protection from feral and native predators. The rock-wallaby's dark, bushy tail is a lot longer than that of other wallabies, helping with identification. Clearing and fires have isolated rock-wallaby populations, reduced the availability of food and fragmented movement corridors between rocky refuges and feeding areas. *Photo by Ian Gynther.*



The **Black-breasted Button-quail** (*Turnix melanogaster*) relies on vine thickets, such as those associated with Brigalow and Hoop Pines. Platelets, circular scrapings on the ground, can indicate the presence of button-quail. Loss of habitat and predation by feral animals threaten this ground-dwelling bird.

*Photo by James Lagden.*



The **Eastern Bristlebird** (*Dasyornis brachypterus*) is a small brown ground-dwelling bird whose distribution in SEQ is now thought to be limited to the World Heritage Area and adjacent private land. Inappropriate fire regimes are thought to have significantly contributed to habitat decline, population losses and isolation. *Photo by Todd Burrows.*

A rather unremarkable-looking plant often hidden amongst grasses and herbs, the **Austral Toadflax** (*Thesium australe*) is remarkable in that it is a root parasite of grasses such as **Kangaroo Grass** (*Themeda australis*). Being hard to find makes it difficult to conserve this plant from loss and degradation of habitats and populations caused by development, grazing pressure and introduced weeds.

The **Boonah Tuckeroo** (*Cupaniopsis tomentella*) is a small tree now restricted to a few small isolated remnants of semi-evergreen rainforests growing on scree slopes and roadsides in the Ipswich-Boonah area. Extensive historical clearing of habitat for agriculture and settlement have caused population decline.

## Migratory Species

The rural catchments of SEQ are frequented by several migratory bird species. Some of these are Australian residents that move around depending on the season (e.g. egrets, monarchs, fantails), whilst other birds travel tens of thousands of kilometres from overseas countries (e.g. shorebirds, snipe, needle-tails). The wetlands within the rural catchments, both natural and constructed (e.g. dams) are of particular importance for migratory shorebirds, especially given the loss of feeding habitats elsewhere in the world.

**Migratory species are those in which the entire population, or a significant proportion, performs cyclical movements between distinct geographical areas, one of which is usually an area in which they breed.**



*Photos by Glenn Leiper*

This **Marsh Sandpiper** (*Tringa stagnatilis*) is one of many shorebirds that travel from their breeding grounds in eastern Europe and Siberia to feed in the wetlands of the Lockyer. *Photo by Deborah Metters.*





# What are we doing?

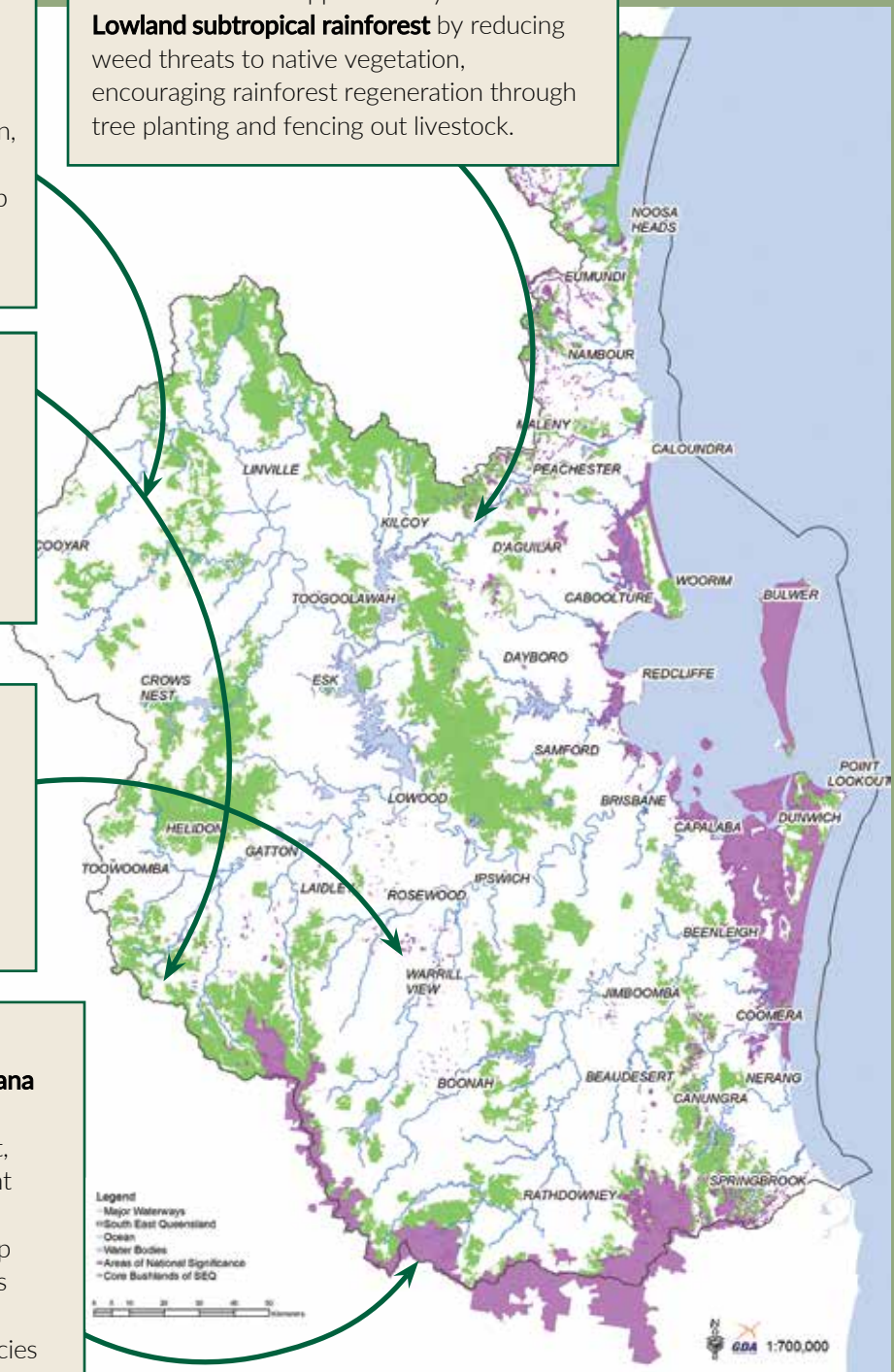
Healthy Land & Water has assisted landholders to conserve threatened species such as the **Eastern Bristlebird, Glossy Black-cockatoo, Koala, Brush-tailed Rock-wallaby** and **Black-breasted Button-quail** by managing fire, controlling livestock and weeds and revegetation, including planting food trees. These projects, in many locations across the rural catchments, help to create important connections and corridors, valuable for all wildlife.

In 2012-13, Healthy Land & Water supported landholders in the upper Stanley to conserve **Lowland subtropical rainforest** by reducing weed threats to native vegetation, encouraging rainforest regeneration through tree planting and fencing out livestock.

Most **Brigalow** in SEQ is on private land. Healthy Land and Water has run an extensive program with landholders to manage weeds such as Cat's Claw Creeper, Madeira Vine and Asparagus Vine, control fire and livestock and undertake plantings to conserve this ecological community.

Fire and stock management, the prevention of clearing and planting to restore or extend this ecological community, are key to **Swamp Tea-tree Forest** survival. Healthy Land and Water has supported private and public landholders to conserve this forest, guided by finer scale mapping of its distribution.

Healthy Land & Water supports actions on adjoining private land to help conserve **Gondwana Rainforests of Australia World Heritage Area** values, including fire and livestock management, invasive weed control and revegetation. Current projects include targeted threatened species habitat protection and restoration in partnership with the Border Ranges Alliance. These projects may help to create important connections and corridors across the landscape which allow species to move around more easily.



# What can you do?

Many of the actions needed to conserve nationally important areas, plants and animals are similar – preventing native vegetation clearing, controlling weeds, managing livestock, using fire appropriately, allowing regeneration and planting native species. If you have nationally important areas of habitat on land you manage and could undertake one or more of these activities (or have another idea), we would love to hear from you.



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