Australian Government



**Department of Sustainability, Environment,** Water, Population and Communities January 2012

# LOWLAND RAINFOREST & LANDHOLDERS

Protecting the critically endangered Lowland Rainforest of Subtropical Australia



Lowland Rainforest (Matt White)

The Lowland Rainforest of Subtropical Australia ecological community was once one of Australia's largest rainforests but, since European settlement, much of it has been cleared or degraded. The surviving remnants of the Lowland Rainforest ecological community provide vital habitat for many native species including threatened wildlife such as Coxen's fig-parrot and the red-legged pademelon. The extent of this Lowland Rainforest remaining in good condition is now protected under Australia's national environment law—the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).



environment.gov.au



Lowland Rainforest (Rosemary Purdie)

### What does protection under national environment law of the Lowland Rainforest mean for landholders?

Australia's national environment law is not about stopping activities and developments by landholders. It is about protecting Australia's unique native plants and animals and the ecosystem services they provide. Supportive land practices by landholders have helped to retain remnants of the lowland rainforest ecological community and it is vital to continue such support. However, you <u>may</u> need federal government approval if:

- the protected Lowland Rainforest occurs on your property, and
- a planned new or intensified activity could have a significant impact on the listed ecological community (see page 5, What activities on my land might need approval?).

If you are not sure whether your activity requires Australian Government approval, you can get free advice from the contacts given at the end of this factsheet.

### Where is the Lowland Rainforest of Subtropical Australia ecological community?

The Lowland Rainforest of Subtropical Australia generally occurs between the mountains and the sea at least two kilometres inland from the eastern Australian coast, mainly within the region from Maryborough in Queensland, south to the Clarence River (near Grafton) in New South Wales. It also occurs further south in isolated areas between the Clarence River and Hunter River such as the Bellinger and Hastings valleys. The ecological community occurs within the South Eastern Queensland and NSW North Coast Bioregions.

A distribution map for the Lowland Rainforest is available at: www.environment.gov.au/ biodiversity/threatened/communities/maps/ pubs/101-map.pdf





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The map shows the area where the ecological community may occur. Note that due to the modified landscape, the ecological community occupies a much smaller area within this outer boundary.

### What are the key characteristics of the Lowland Rainforest?

Lowland Rainforest generally occurs in low-lying areas below 300 metres above sea level. It is occasionally found above 300 metres altitude on north-facing slopes. The ecological community occurs mainly on soils derived from basalt and alluvia (including sand) in areas with a high annual rainfall more than 1300 mm/year.

The ecological community is usually a tall forest with a closed tree canopy cover and multiple canopy layers. The tree species present commonly have leaves that are compound (i.e. made up of several leaflets) or are relatively large, such as white booyong (*Argyrodendron trifoliolatum*). Typically there are relatively few gum trees (*Eucalyptus*), teatrees (*Melaleuca*) and she-oaks (*Casuarina*) in the canopy. Trees with buttresses such as fig trees are common as is an abundance and diversity of ferns such as bird's nest fern (*Asplenium nidus*) and vines such as lawyer vine (*Calamus muelleri*) and wonga wonga vine (*Pandorea floribunda*).

Lowland Rainforest has the most diverse tree flora of any vegetation type in NSW and the species composition of the canopy varies between local stands and between regions. The ecological community typically has a high species richness (more than 30 native woody species per patch) but in some areas a particular species may dominate the canopy e.g. a palm forest, usually dominated by bangalow palm (*Archontophoenix cunninghamiana*) or cabbage palm (*Livistona australis*); or riparian areas dominated by weeping satinash/weeping lilly pilly (*Syzygium floribundum*).

Lowland Rainforest also has a high diversity of fauna species and provides vital habitat to a range of rainforest specialist species, including threatened species such as Coxen's fig-parrot (*Cyclopsitta diophthalma coxeni*) and the redlegged pademelon (*Thylogale stigmatica*).

For more details on the Lowland Rainforest, including lists of flora and fauna species go to:

www.environment.gov.au/cgi-bin/sprat/public/ publicshowcommunity.pl?id=101&status=Critic ally+Endangered.







*Ptilinopus superbus,* Superb Fruit-Dove (Matt White)

# How do I know whether the Lowland Rainforest on my land is protected?

The patches of Lowland Rainforest that remain today occur in varying condition as a result of landuse history. The Lowland Rainforest is only protected as a matter of national environmental significance under national law when it is in relatively good condition. Patches of the ecological community are generally in good condition if:

- the cover of all canopy species across the patch is at least 70%; and
- more than 50% of the total vegetation cover comprises native species; and
- there are 30 or more native woody species present in a patch; and
- the rainforest patch is above a minimum size (this depends on the type of rainforest remnant present).
- Note some of these condition thresholds differ for different patch types.

### **Patch Types**

The Lowland Rainforest includes natural remnants (where the original native vegetation remains after the surrounding area has been modified), naturally regenerating remnants, as well as patches that have been disturbed and actively recovered through supplementary plantings. For more information about condition, refer to the listing advice for the Lowland Rainforest ecological community at: www.environment.gov.au/biodiversity/threatened/ communities/pubs/101-listing-advice.pdf.

Rainforests that do not meet the condition criteria may still be protected under state regulations, such as the NSW *Native Vegetation Act 2003*, the NSW *Threatened Species Conservation Act 1995*, or the Queensland *Vegetation Management Act 1999*.

Some of the ecological community (about 20%) also receives protection because they occur within some National Parks that make





up the World Heritage listing for 'Gondwana Rainforests of Australia'.

## What routine landholder activities do not need approval?

This ecological community was officially protected under national environment law on 25 November 2011. Lawful activities that began before the EPBC Act came into effect on 16 July 2000 can continue without further approval. Any planned activity that is likely to have a significant impact on the Lowland Rainforest could require federal government approval.

The following types of activities will not need approval on your land:

- maintaining existing fence lines, tracks, roads or fire breaks
- replacing or maintaining existing sheds, other buildings and yards
- maintaining existing grazing regimes, where relevant (i.e. type of livestock, stocking rates, timing of grazing etc.)
- ongoing activities for horticulture production
- controlling non-native animals and weeds (with minimal disturbance, or by selective spot spraying).

## What activities on my land might need approval?

New activities that are likely to have a significant detrimental impact on the ecological community may need federal government approval. New activities that could require approval include:



Ficus obliqua - small leaved fig (Matt White)

- land/vegetation clearing or substantial lopping of trees within the Lowland Rainforest
- significantly intensifying grazing within a patch of Lowland Rainforest
- substantially changing or intensifying methods of weed control or fertiliser use in or adjacent to a patch of Lowland Rainforest (see buffer zone, page 6)
- new infrastructure, plantings, pasture improvement or land/vegetation clearing etc. near to a patch of the ecological community that may have a significant impact such as mechanical disturbance, introducing exotic plant species or changing drainage patterns (see buffer zone, page 6).



#### What is the buffer zone?

A minimum 50 metre buffer zone is recommended to avoid significant impacts. The buffer zone is based on the root zone for the outermost trees but it is not part of the ecological community itself. However, a new or intensified practice or activity within 50 metres from a patch of the Lowland Rainforest ecological community is likely to require referral if it may have a significant impact on the adjacent patch of the ecological community. Examples of activities undertaken within the buffer zone that may have a significant impact on the ecological community are:

- starting new, or intensifying existing, use of herbicides and fertilisers (spray drift);
- new infrastructure works;
- plantings (of species not native to the local rainforest); or
- · land/vegetation clearing.

### Can I get help to improve or restore Lowland Rainforest of Subtropical Australia?

There may be natural resource management projects funded by the Australian Government's Caring for our Country initiative which can help you manage and recover the protected Lowland Rainforest ecological community.

For more information go to: www.nrm.gov.au/ or contact your:

- local NRM regional body: www.nrm.gov.au/ about/nrm/regions/index.html; or
- Caring for our Country Regional Officers: www.nrm.gov.au/contact/officers.html.



Lowland Rainforest (Karina Richards)





#### Where can I get more information?

More information on Lowland Rainforest, its condition thresholds for national protection, threats and priority conservation actions is contained in the comprehensive listing advice and the conservation advice for this ecological community at:

www.environment.gov.au/cgi-bin/sprat/public/ publicshowcommunity.pl?id=101&status=Critic ally+Endangered.

If you are not sure whether your activity requires Australian Government approval, you can get free advice from the Department of Sustainability, Environment, Water, Population and Communities:

Phone: 1800 803 772 Email: ciu@environment.gov.au

If you are a farmer, advice is available from the department's environment liaison officer at the National Farmers' Federation: Phone: 1800 704 520 Email: environment@nff.org.au

- Web: www.environment.gov.au/epbc/ information/farmers.html
- or www.nff.org.au/policy/nrm.html



Toona australis, red cedar (Matt White)

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