

# MONTANE

## VEGETATION TYPE 24

Regional Ecosystem: 12.8.19

Montane Heath on Cainozoic Igneous Rocks



## COMMUNITY STRUCTURE

Montane heath is a low shrubland that grows to 3m in height. It grows on thin soils and areas of exposed rock on cliff and mountain tops. A mix of tea-trees and other prickly leaved shrubs are common, particularly *Leptospermum microcarpum*, *L. variable*, *Persoonia media*, *Hakea salicifolia*, *Acacia obtusifolia*, *Allocasuarina rigida* and *Baeckea linifolia*. Isolated low emergent trees may also be present. The understorey also includes small-leaved heath and lithophytic (rock-dwelling) orchids such as *Dendrobium kingianum* and *Pterostylis daintreana*.



## Characteristic plant species

Characteristic plant species for this vegetation type are listed below. Dominant (most numerous) species are shaded.



Indicates species is a preferred koala food tree\*



Indicates species is a Glossy Black-Cockatoo feed tree species



Indicates species is a City-wide significant species

\* It is noted that in addition to preferred food trees, koalas utilise a range of eucalypt and non-eucalypt tree species for supplemental feeding and other uses such as shelter. These other species are also important and necessary features of koala habitat.

### EMERGENT

Tallest trees, visible above the canopy



**Bell-fruited Mallee Ash**  
*Eucalyptus codonocarpa*

### SHRUB LAYER

Dominant layer of vegetation made up of small trees and woody shrubs



**Small-fruited Tea-tree**  
*Leptospermum microcarpum*



**Mountain Tea Tree**  
*Leptospermum variabile*



**Rigid She Oak**  
*Allocasuarina rigida* subsp  
*rigida*



**Flax-leaf Heath Myrtle**  
*Baeckea linifolia*



## SHRUB LAYER

Dominant layer of vegetation made up of small trees and woody shrubs



**Shrubby Platysace**  
*Platysace lanceolata*



**Mountain Mintbush**  
*Prostanthera phyllicifolia*



**Blunt Leaf Wattle**  
*Acacia obtusifolia*



**Bushy Cassinia**  
*Cassinia subtropica*



**Melaleuca-Leaved Bearded Heath**  
*Leucopogon melaleuroides*



**Willow-leaved Hakea**  
*Hakea salicifolia*



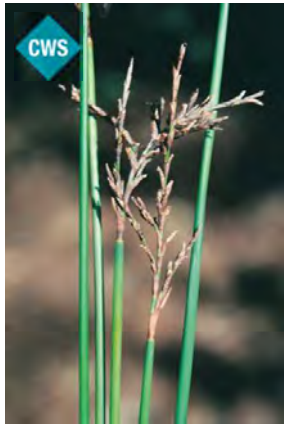
**Prickly Moses**  
*Acacia ulicifolia*



**Tall Cassinia**  
*Cassinia compacta*

# GROUND LAYER

Lowest layer of vegetation. Plant types can include grasses; graminoids (non-woody plants with a grass-like morphology); ferns; forbs (non-woody, broad-leaved, flowering plants).



**Tailed Swordsedge**  
*Lepidosperma clipeicola*  
GRAMINOID (SEDGE)



**Wiry Panic**  
*Entolasia stricta*  
GRASS



**Forest Plectranthus**  
*Plectranthus parviflorus*  
FORB



**Baby Greenhood**  
*Pterostylis parviflora*  
ORCHID (GROUND)



**Coral Fern**  
*Gleichenia rupestris*  
FERN



**Screw Fern**  
*Lindsaea linearis.*  
FERN



**Blunt-leaved Pea**  
*Pultenaea retusa*  
SHRUB (LOW)



**Daintree's Greenhood**  
*Pterostylis daintreana*  
ORCHID (GROUND)



**Pink Rock Orchid**  
*Dendrobium kingianum*  
ORCHID (LITHOPHYTE)

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## City-wide significant plant species



The City of Gold Coast recognises species which are locally significant as City-wide significant (CWS) species. These species are important because they may be threatened, restricted to the Gold Coast, or at the edge of their geographic range. A number of characteristic species are identified above as CWS species. There are no additional CWS species identified as occurring within this vegetation type.

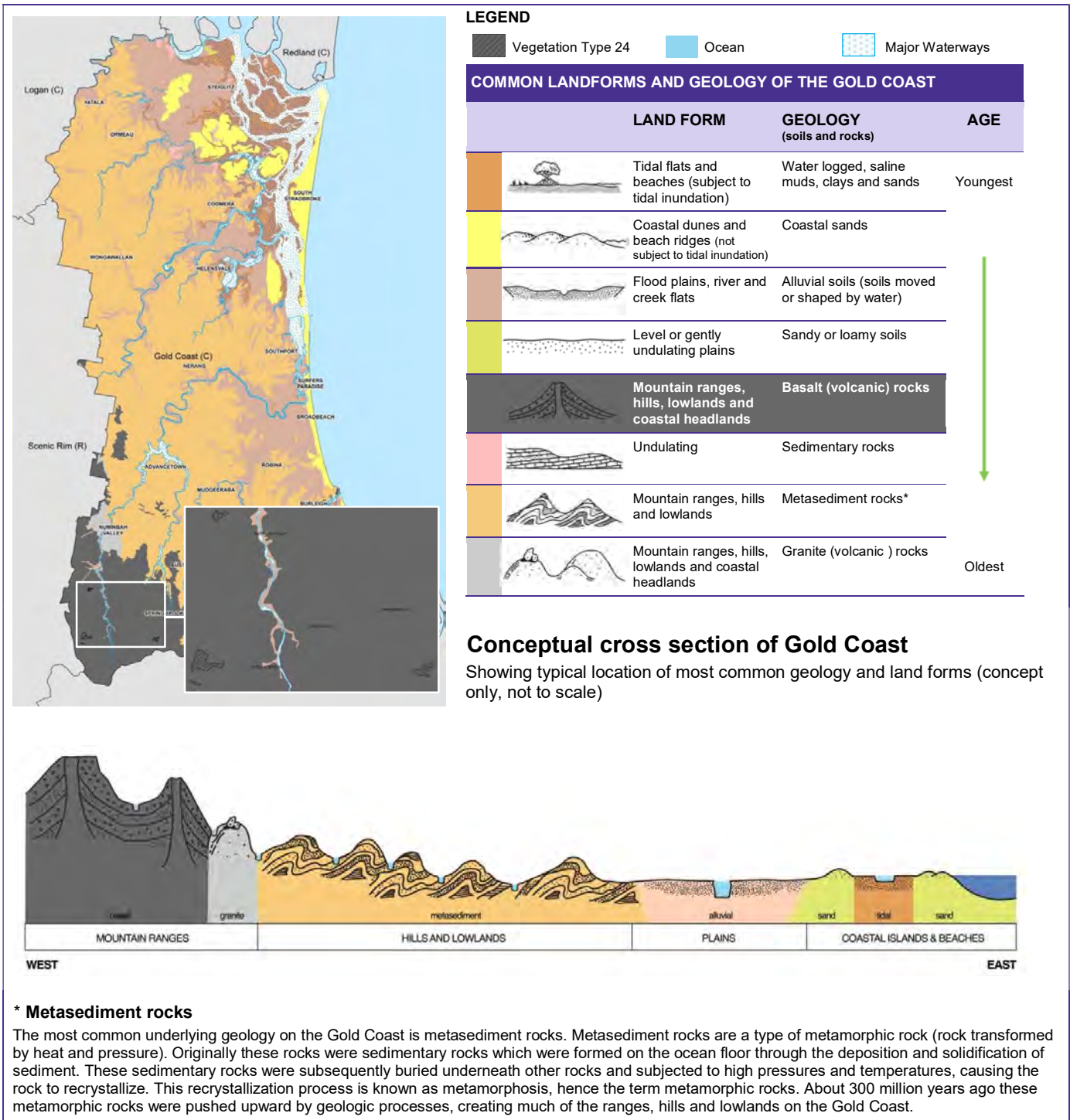


## OCCURRENCE

Native plants occur in vegetation communities, which are consistently associated with a particular soil type, landform (shape of the land, e.g. hills or plains) aspect (position on a slope in relation to the sun) and climate.

This vegetation type occurs on areas of exposed rock and dry plateaus, and high slopes adjoining cliffs and mountain tops, on thin, rocky 'rhyolitic' soils (from fine-grained, igneous rock rich in silica). Small patches of this vegetation community occur, and may not be mapped and incorporated into adjoining vegetation types. The main mapped areas of this community are located at Canyon Lookout at Springbrook, Dave's Creek in Lamington National Park, and Pages Pinnacle at Numinbah. Additional small areas are located at Mt. Tallebudgera and Bally Mountain in Tallebudgera.

## Historic distribution of Vegetation Type 24



## 2017 EXTENT AND CONSERVATION STATUS

### Gold Coast

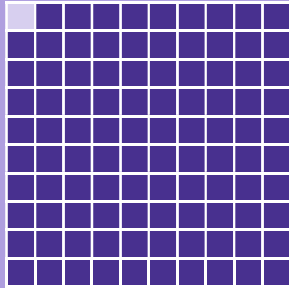
Historically, only small patches of this vegetation type occurred on the Gold Coast. Because it typically occurs on mountain tops and high plateaus which have not been subject to development, almost 100% of its historical extent still remains. The 2017 extent\* of this vegetation type on the Gold Coast was 49.54 ha.

**1 HECTARE (HA) = 2.46 ACRES ≈ THE SIZE OF AN INTERNATIONAL RUGBY FIELD**

#### EXTENT (ha)

Historic  
49.55ha

2017\*  
49.54ha  
99.98% of  
historical  
extent

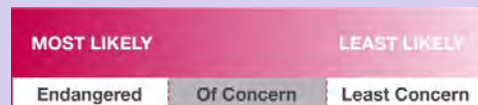


\* Extent as mapped in 2017. Includes remnant vegetation only. Does not include disturbed remnant or regrowth.

### Queensland

The conservation status of vegetation in Queensland is specified under the *Vegetation Management Act 1999*, which lists this regional ecosystem (RE 12.8.19) as being 'Of Concern'.

#### LIKELIHOOD OF BECOMING EXTINCT (in QLD) due to biodiversity loss/degradation



## USEFUL RESOURCES

City of Gold Coast website: Environmental weeds and invasive plants.

Find out more about regional ecosystems at the Queensland Government Regional Ecosystems webpage.

## CREDITS

Content – ngh Environmental and Jason Searle.  
Vegetation Type Photo – Lui Weber ©  
Unless otherwise noted all other photos – Glenn Leiper ©

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## THREATS

Montane heath is a restricted community that typically occurs in small patches on mountain tops and high plateaus. It requires specific fire regimes to be maintained within the mosaic it exists with adjoining vegetation. Changes in conditions, including increased fire and/or increased exposure to drying winds may affect the viability of this community into the future, and increases in such conditions due to climate change represent a potential threat to its continued occurrence. Although soils are thin and do not favour vigorous weed growth, the open nature of these areas expose them to some weed growth, and appropriate weed and fire management are important to the preservation of Montane heath vegetation.

### About common threats

#### Clearing

Native vegetation is protected by Federal, State and local legislation. However, with increasing population growth in the region, Southeast Queensland is experiencing large amounts of vegetation clearing, particularly in areas designated for urban development. Protecting native vegetation on your property is one of the most beneficial things you can do to protect wildlife and the natural environment.

#### Weeds

Environmental weeds are the second biggest threat to our natural environment after land clearing. Environmental weeds (introduced plants that have naturalised and are invading our bushland) degrade our natural environment by:

- out competing native plant species for available nutrients and light,
- taking over and transforming native landscapes often leading to local plant or animal extinctions and loss of biodiversity,
- reducing the availability of food and other resources for many native animals whilst sometimes benefiting pest animals,
- increasing the risk of destructive wildfire, and /or
- often being toxic to people and animals.

#### Fire

Very broadly, vegetation types are either adapted to fire or fire sensitive. Fire can become a threat if:

- it extends into vegetation types which should not be burnt e.g. rainforest,
- the frequency and/or intensity of the fire is too high, and/or
- the area burnt is too large.

#### Grazing

The grazing of animals like cattle, horses, goats and feral animals such as deer can cause trampling or loss of diversity of seedlings and compact soil, preventing natural regeneration.

#### Collecting

Unethical and illegal collection of plant specimens in the wild poses a serious threat to some species, particularly orchids, grass trees and epiphytes.

#### Climate change

Changes in temperature and rainfall can have significant effects on our city's vegetation. For example, without consistent rainfall, areas become drier, potentially resulting in higher fire frequency and/or intensity, which some plants and vegetation communities won't be able to tolerate. Plants (and animals) need available space to migrate as conditions change, with high altitude species at the greatest risk as there is nowhere suitable for them to go. Warmer conditions may also provide the right habitat for a greater variety of weeds. As sea levels rise, salt water moves further upstream and vegetation also becomes inundated.