

# Masig Land and Sea Profile



## OVERVIEW

Traditional island name	<b>Masig</b>
Western name	<b>Yorke Island</b>
Central Islands Cluster	<b>Kulkalgal Nation</b>
Local government	<b>TSIRC &amp; TSC</b>
Registered Native Title Body Corporate (RNTBC)	<b>Masigalgal (TSI) Corporation RNTBC</b>
Land type	<b>Coral cay</b>
Air distance from Thursday Island (km)	<b>160</b>
Area (ha)	<b>167</b>
Indicative max length (km)	<b>2.7</b>
Indicative max breadth (km)	<b>0.8</b>
Max elevation (m)	<b>6</b>
Coastline length (km)	<b>6</b>
Population (2011 ABS Census)	<b>238</b>
Area of island zoned development (ha)	<b>46</b>
Area of disturbed / undisturbed vegetation (ha/%)	<b>71 (42.5%) / 96 (57.5%)</b>

## RANGER GROUP



Rangers  
2015



## MANAGEMENT PRIORITIES

### LAND



- Community garden
- Disaster recovery
- Coastal management
- Feral animals
- Weeds

### SEA



- Seagrass
- Water quality
- Coral monitoring
- Turtle and dugong
- Marine debris

### PEOPLE



- Traditional ecological knowledge
- Traditional and cultural sites
- Community involvement
- Research support
- Visitor management

## KEY VALUES



Healthy sea ecosystems



Marine water quality



Coral reefs



Seagrass meadows



Dugong



Marine turtles



Subsistence fishing



Healthy land ecosystems



Sustainable human settlements



Coasts and beaches



Mangroves and wetlands



Coastal birds

## CLIMATE CHANGE RISK

Vulnerability to sea level rise (+1.0m) **High**

Sea level rise response options **Low**



## COMMUNITY OVERVIEW

Masig is a very small low-lying coral cay in the Central Islands Cluster of the Torres Strait about 160km northeast of Thursday Island. The main inhabited island of Masig and connected uninhabited island of Kadal are located on the eastern end of a narrow east-west orientated fringing reef system.

The topography of Masig is very flat with ground level generally less than three metres above local mean sea level. More than half the island is covered in undisturbed vegetation including dense trees on the eastern and western parts of the island.

Native title is recognised over Masig and is held in trust by the Masigalgal (Torres Strait Islander) Corporation RNTBC.



This map is based on existing dugong and turtle management areas and shows the general areas of operation for community-based land and sea Rangers. Best available information (including traditional place names) has been used at the time of publication. This map is indicative only and not intended for native title purposes.

## RECENT ACHIEVEMENTS

Recent land and sea management achievements include:

- Ranger group established and Rangers implementing activities under Working on Country plans
- Community-based dugong and turtle management plan in place
- Community participation in the Sustainable Horticulture Project, including upgrades to the Mothers Well Nursery and community fruit tree planting
- Marine debris monitoring and management activities, including removal of ghost nets
- Weed mapping and management activities, including Leucaena control program
- Ranger participation in mangrove and shoreline monitoring and surveys
- Community participation in joint research process with CSIRO and TSRA on community resilience to climate change
- Real time weather data station installed and operational on Masig

## LAND AND SEA MANAGEMENT AREA

The Masigalgal land and sea management area includes a number of uninhabited islands, reefs and marine areas (see map) covering about 479,608 ha.

## MAIN THREATENING PROCESSES

The main threatening processes affecting the Masigalgal land and sea management area relate to climate change (coastal erosion, sea level rise), the spread of pest plants and animals and declining water quality (including marine debris).

## LAND AND SEA MANAGEMENT PRIORITIES

Fifteen management priorities under the themes of Land, Sea, and People are identified in the Masig Working on Country Ranger Plan. There are 3 Ranger positions (as at 2015). The Masigalgal Rangers will continue to work closely with the community on priority projects including dugong and turtle management, protecting significant cultural sites and preserving Traditional Ecological Knowledge.

## DUGONG AND TURTLE MANAGEMENT

The Masig community are actively implementing the Masigalgal Dugong and Turtle Management Plan 2011-2016, that is built on the vision:

*“To ensure danghal and waru is here for our next generations into the future and that our traditional knowledge continues to be passed on through the generations. Masigalgal community must be managers of these two animals because all aspects of our lives and livelihoods link with the danghal and waru.”*

## CLIMATE CHANGE PROFILE

Climate change in the Torres Strait will involve a warming of air and sea temperatures, rising sea levels, more severe weather events, ocean acidification and some changes to rainfall patterns, evaporation, wind and ocean currents. These changes are predicted to have long-term impacts on all of the region's key values across the Land, Sea and People themes. Masig has a 'high' vulnerability rating to sea level rise and a 'low' response options rating (there are limited options to move to a safer site on the island). A rise of 20 cm will start to cause significant tidal inundation of the community. For more information on climate change, please see the Torres Strait Climate Change Strategy 2014-2018.

## TRADITIONAL ECOLOGICAL KNOWLEDGE

The Masig community are working to protect Traditional Ecological Knowledge (TEK) for future generations. The TEK system enables communities to access information for their own cultural maintenance; support sustainable community based environmental management approaches; and allows Rangers' planning and on-ground cultural and natural resource management activities to be informed by *Ailan Kastom* (Island Custom).

## COMMUNITY HORTICULTURE

The Masig community has an active food producing community garden in place to preserve traditional gardening skills and support greater community self-sufficiency in food production. Masigalgal Rangers have played a leading role in the establishment and maintenance of the Mothers Well Nursery. LSMU are investigating opportunities to use the Masig community nursery as the central hub for propagation for revegetation and beautification projects throughout Torres Strait.

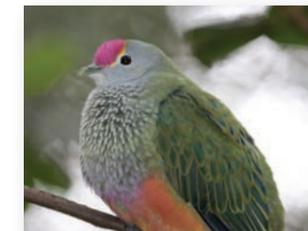
## FUTURE SUSTAINABILITY INITIATIVES

The Masig community is highly reliant on air transport, diesel powered electricity generation and barge transport of supplies and materials to and from the community. Renewable energy options will be explored to reduce carbon emissions and work towards energy independence.

## COMMUNITY ENGAGEMENT

Masigalgal Rangers engage with the community through frequent community notices and Ranger talks, community participation in ranger activities, and an annual community celebration and report back. This ensures land and sea management activities remain relevant to community priorities.

## SOME OF MASIG'S IMPORTANT ANIMALS & PLANTS



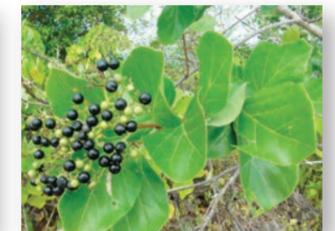
Rose-crowned Fruit-dove  
Photo: Moonlight0551, Wikimedia Commons



Macleay's Rainbow Skink  
Photo: Ian Gynther



Chalmers Aristolochia  
Photo: David Fell



Piner  
Photo: David Fell

## FURTHER INFORMATION

For more information, visit the TSRA website at <http://www.tsra.gov.au> and the Torres Strait eAtlas <http://ts.eatlas.org.au/ts>