

## Mosquitoes

### What does Redland City Council's Pest Management Team do?



Redland City Council's Pest Management Team monitor and treat mosquitoes in saltmarsh environments along the Redlands Coast and freshwater locations. On average, 9500 hectares of land is treated in Redland City via ground and aerial applications each year. Regular surveillance is also undertaken across the City to monitor the species of mosquitoes and their activity levels. While treatments form a significant aspect of the Mosquito Management Program, other aspects include community engagement, exotic mosquito surveillance and regional collaboration, through mosquito research and innovative technologies for treatments.

Heavy rain or higher than usual tides can trigger mosquito breeding. Larger areas in the Redlands are treated by aircraft, whereas smaller areas are treated via ground application. The below products used in these treatments are safe, environmentally friendly and only target mosquito larvae:

- **Bacillus thuringiensis subspecies israelensis (Bti)** - Council uses a bacterial larvicide called Bti to spray mosquito breeding areas when needed. This larvicide is specific to mosquitoes.
- **(S)- Methoprene** – This chemical is an insect growth regulator with sustained release formulations to inhibit mosquito larvae from turning into adult mosquitoes.

### Where do mosquitoes breed?

Saltmarsh mosquitoes breed in pools of water left behind by higher than normal tides in salt water marshes and mangrove swamps. Redland City has more than 800 hectares of known saltmarsh mosquito breeding areas.

Fresh water mosquitoes can be found breeding in pools left after rain and in any man made container, such as rain water tanks, pot plant bases, containers, bird baths and traps.

### Mosquito breeding season

The warmer months of the year, generally October to April, provide ideal mosquito breeding conditions. Mosquito bites often occur around dusk and dawn when mosquitoes are most active.

Weather conditions such as rainfall can also influence mosquito numbers by causing ponding within the breeding area and the hatching of the mosquito eggs.

### What can residents do?

You can take steps toward reducing the mosquito problem by using some basic control measures:

- dispose of all tins, jars, tyres, and other water holding receptacles in your yard
- once a week, empty all water holding containers such as flower vases, pot plant bases, buckets, bird baths and other water holding containers
- screen all openings to water tanks and other large water containers with wire gauze not coarser than 1mm aperture mesh
- keep fish ponds stocked with native fish that can eat mosquito larvae
- ensure roof gutters are clean and free of leaf litter so they drain freely with no low points where water can accumulate
- fill pot plant bases with sand to absorb water, with outdoor plants discard the bases altogether
- keep swimming pools clean and chlorinated

## Personal protection

Repellents are very effective against mosquitoes and should be used when engaged in outdoor activities, particularly the early morning and late afternoon or evening periods when mosquitoes are most active.

There are several different active ingredients used in personal insect repellents. If a natural repellent is preferred, there are many options available from your local pharmacy or convenience store. Choosing a repellent that suits you is the key.

When gardening, wear loose fitting, long sleeved shirts and long pants in a light colour – mosquitoes are attracted to dark colours.

The use of mosquito coils or citronella is also effective as the smoke and insecticide in burning these products interferes with the insect's senses. Coils should be placed upwind of where you are sitting or working.

Screening windows and doors in your house will greatly reduce the number of mosquitoes encountered inside, and ceiling fans will also help by keeping the air inside circulating.

You also may wish to also consider a barrier treatment. Barrier treatments involve spraying areas where mosquitoes rest, such as shaded alcoves around buildings, underneath outdoor furniture, dense vegetation and shrubbery. For further advice on whether a barrier treatment is suitable for your property, contact your local pest technician.



## Mosquito facts

- There have been over 40 different species recorded within the Redland Coast area
- *Aedes vigilax* (Salt marsh mosquito) is the predominate mosquito of coastal Queensland. This mosquito been known to fly 50 km from breeding places
- Some species of mosquito, like the *Culex annulirostris* breed quickly after rainfall and is the most abundant freshwater mosquito in South East Queensland
- Some species of mosquito, like the *Aedes vigilax*, are a nuisance and can carry viruses like Ross River and Barmah Forest Virus
- The Dengue fever mosquitos, *Aedes aegypti* and *Aedes albopictus* have not yet been found in the Redlands Coast
- Some female mosquitoes do not need a blood feed before they lay eggs
- Not all mosquitoes spread disease or bite humans and only the female mosquitoes bite humans



## For more information contact

**Council Webpage:**

[www.redland.qld.gov.au/mosquitoes](http://www.redland.qld.gov.au/mosquitoes)

**Queensland Health Webpage:**

[www.qld.gov.au/health/conditions/all/prevention/mosquito-borne](http://www.qld.gov.au/health/conditions/all/prevention/mosquito-borne)

**QIMR Berghofer Centre Webpage:**

[www.qimrberghofer.edu.au/discover/mosquito-control](http://www.qimrberghofer.edu.au/discover/mosquito-control)

Redland City Council Pest Management Team

Ph: 3829 8999