

# History of yellow crazy ants in Cairns and Kuranda

Yellow crazy ants are one of the world's 100 worst invasive species and pose a significant threat to the environment, native wildlife, agriculture, industry and people's lifestyles.

They are native to Southeast Asia and have been spread around the world via international trade and shipping.

Yellow crazy ants were first detected in Cairns in 2001 and in Kuranda in 2014.

The Wet Tropics Management Authority administers the Yellow Crazy Ant Eradication Program which is jointly funded by the Australian and Queensland governments.

The Authority's Eradication Program was established in 2013 to eradicate yellow crazy ants from within and adjacent to the Wet Tropics World Heritage Area.

The Eradication Program has grown into a world-leading example of what strong leadership, community partnerships and science-driven management can achieve.

Active participation and support from the community, stakeholders, industry and landholders have been critical to its success.



# **Identification** and habitat

Yellow crazy ants are named for their fast, erratic movement when disturbed.

They are slender, between 3mm and 4mm in length and have long antennae and legs.

Yellow crazy ants are golden-brown with a darker brown abdomen that is sometimes striped.

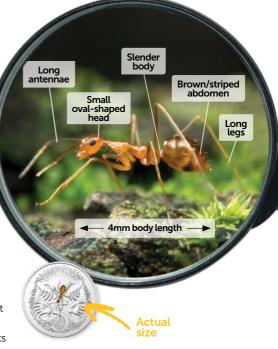
Yellow crazy ants do not bite or sting they spray formic acid to subdue their prey, immobilising or blinding invertebrates and other small animals.

Yellow crazy ant nests are highly variable, not obvious and can be hard to spot. The ants take advantage of structure such as tree roots but can also nest in loose leaf litter.

This species is polygynous, which means they may have multiple queens in a single nest, as a result, their rate of reproduction can be very high.

Rather than competing with each other, yellow crazy ants readily collaborate and form super-colonies:

large, interconnected networks of nests that can contain hundreds of queens and millions of ants.



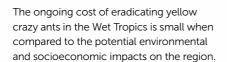
Once established, infestations can rapidly expand by up to 100m a year and can also spread by being washed downstream along waterways.

Yellow crazy ants forage both day and night and thrive in a variety of habitats including:

 natural environment—particularly along waterways, under woody debris or rocks, and at the base of trees

- residential areas—in pot plants and green waste, under concrete and timber, and inside retaining walls, wall cavities or electrical appliances
  - farmland—in crops, hay bales and straw, and machinery.

#### **Yellow crazy ant impacts**



#### **Agriculture**

Yellow crazy ants can reduce yields in sugarcane and other crops, adversely affecting farmers' revenues.

In dense infestations, yellow crazy ants encourage the growth of scale insects, which are a sugar source for the ants.

High numbers of scale insects can reduce sooty mould.





They prey on native wildlife, including small reptiles, frogs, nesting birds, and insects and other invertebrates.

When yellow crazy ants are in high abundance, they reduce overall species diversity and numbers.

They out-compete or kill native ant species while larger species such as mammals and birds are pushed out of their habitat, unable to cope with the high numbers of acid-spraying ants.

#### Lifestyle

Yellow crazy ants can significantly affect the quality of life of residents living with the ants in and around their homes.

The ants spray formic acid at any potential threat, including humans and household pets.

In heavy infestations the ants may occupy electrical boxes and other equipment, with the potential to cause short circuits and other damage.



The Wet Tropics World Heritage Area stretches along the northeast coast of Australia for some 450km and is globally significant for its outstanding natural values.

Encompassing almost 900,000ha of mostly tropical rainforest, this stunningly beautiful area is extremely important for its rich and unique biodiversity.

It provides refuge for many isolated populations of plants and animals, many of which are found nowhere else.

Because of its exceptionally high levels of diversity, the World Heritage Area is recognised as one of Earth's 36 biodiversity hotspots.



## Yellow crazy ant treatment and eradication

Local eradication is the most viable and cost-effective option to prevent the spread of yellow crazy ants.

With most of the infestation areas being on land outside the Wet Tropics World Heritage Area, much of our work involves liaising with community and industry to organise access to ensure work is undertaken safely and conveniently.

Positive collaboration with residents, landholders and industry has been key to the success of the Authority's Eradication Program.



#### What we do

After an infestation is first identified and mapped, it receives five treatments over two years.

This is followed by several years of surveys to ensure the treatment has been effective and yellow crazy ants do not return.

We follow a comprehensive 14-stage detection to eradication process that guides decisionmaking specific to each individual site.



## When survey and treatment happens

Due to the region's tropical climate, the survey and treatment season runs from January to September each year, weather permitting.



### What treatment we use

The Authority uses a product called AntOff®. It is specifically formulated to be attractive to ants.

It is a fishmeal pellet containing fipronil (commonly used in popular veterinary products at significantly higher doses for tick and flea control in cats and dogs).





#### How the treatment works

AntOff® is applied at a very low dosage.

Because of this, worker ants do not immediately die from direct contact with the AntOff® treatment

Instead, they carry the treatment back to the nest, where it is shared among the colony, soon killing workers and queens.



#### How we treat properties

AntOff® is distributed by several methods including by hand, while helicopters are used for broadscale treatment and a drone for smaller, hard-to-reach areas.



#### Does it cost residents to have their property treated?

No. Inspection for suspect ants, surveillance, and treatment are at no cost to residents.





# Preventing further spread

The most common way yellow crazy ants are spread is through human-assisted movement.

They can hitch rides in soil, mulch, vegetation and green waste, machinery and construction materials, pot plants and even outdoor furniture.

Residents in areas where infestations have been detected, such as near Kuranda and south of Cairns, should not move material that could potentially carry yellow crazy ants and unintentionally cause a new infestation outside of these areas.

If in doubt, please contact the Authority's Eradication
Program for a free check of the material before transporting.





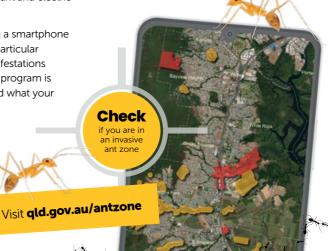
# Are you in an AntZone?

AntZone is a user-friendly online map showing where yellow crazy ant and electric ant infestations are found.

AntZone is best accessed via a smartphone and allows you to search a particular address to learn about ant infestations in your selected area, which program is managing the infestation and what your responsibilities are.

Remember, if you need

to move materials, including soil, mulch, vegetation and green waste, check AntZone to ensure you're not taking the risk of spreading invasive ants.





## Yellow Crazy Ants in Cairns and Kuranda

## **Handbook**

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