

FACTSHEET

African Big-headed Ant eradication

Native to Africa, the African Big-headed Ant (*Pheidole megacephala* — Big-headed Ant) is now found throughout temperate and tropical zones around the world. **It is one of the world's 100 worst invasive species.**

It is also one of six national priority tramp ant species due to its impact on Australian biodiversity. The Big-headed Ant has been accidentally introduced to Lord Howe Island (LHI) recently, and is now established within the settlement area.

The Lord Howe Island Board (LHIB) has received funding assistance from the Commonwealth Caring for our Country program to eradicate Big-headed Ants from LHI. This factsheet outlines the planned eradication program.

Threats to Island biodiversity

Despite their small size, Big-headed Ants are extremely aggressive predators and significantly reduce the diversity and abundance of native terrestrial invertebrates in areas that they colonise. Native invertebrates help maintain ecosystem functions (e.g. decomposition and seed dispersal), so any impacts on LHI invertebrates will have consequences for the whole Island ecosystem.

Although Big-headed Ants are largely confined to the settlement area at present, if left uncontrolled they may spread into the Island's natural areas, including the high conservation value southern mountains.

Identification

African Big-headed Ants are similar in appearance to two other species of ant on LHI: a native big-headed ant (*Pheidole* sp.), and the Guinea Ant (*Tetramorium bicarinatum*).

Guinea Ants are larger than African Big-headed Ants and are more distinctly reddish with a black abdomen. African Big-headed Ants are more likely to be confused with the native big-headed ant.

AFRICAN BIG-HEADED ANTS



Minor worker

Contrary to their name, only the major workers have an oversized head.



Major worker

Please notify the Lord Howe Island Board if you suspect you have seen an African Big-headed Ant.

Photography © Antweb.org

The distinguishing features are:

African Big-headed Ant	Native big-headed ant
<ul style="list-style-type: none">• Ginger-brown with darker head & abdomen• Small (2–4 mm)• Aggressive & fast moving• Major workers have a dark-coloured head	<ul style="list-style-type: none">• Uniformly yellow• Very small (<1–2 mm)• Non-aggressive & slow• Major workers have a yellow-coloured head

Eradication program

It is vital that we eradicate African Big-headed Ants before they spread across the Island. To this end, an African Big-headed Ant eradication strategy for LHI has been developed in consultation with Australia's leading ant eradication specialist, Dr Ben Hoffmann of the CSIRO.



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The LHI eradication program builds on the knowledge and experience gained through previous Big-headed Ant work conducted on the Island by LHIB staff.

The initial phases will be conducted between May 2012 and May 2013. Follow-up treatment, as required, and monitoring will be undertaken until eradication has been achieved. Eradication is achieved when no Big-headed Ants are found for two consecutive years.

Methodology

To achieve eradication, the program will be conducted in three phases.

1. Pre-treatment surveys

Pre-treatment surveys will be conducted to determine the distribution of Big-headed Ants across LHI. All Ant surveys will be conducted in daylight during dry weather. Surveys will be conducted throughout the settlement area and in areas frequented or disturbed by people, including all walking tracks in the Permanent Park Preserve.

Surveys will involve:

- Visual searches in potential habitat, including in and around buildings and gardens.
- Lures using canned fish. These lures will be clearly flagged and will not contain poison.

2. Treatments

All Big-headed Ant infestations will be treated using Amdro® (BASF, Australia) and clearly flagged. As Amdro® is toxic to fish and aquatic invertebrates it will only be applied in dry weather in temperatures between 24° and 30°C. Care will be taken to avoid contaminating waterways and waterbodies.



Field staff undertaking surveys

In addition to these treatments, all buildings within infested areas will be treated indoors using Amdro® inside Ant Café® baiting stations (Innovative Pest Control Products, Florida, USA). These baiting stations will be replenished until Big-headed Ants are no longer detected.

LHI residents should not apply Amdro® themselves because the timing and method of treatment are crucial aspects of an effective eradication program.

Children, pets, livestock & wildlife

When spread at the recommend rate, Amdro® is not considered hazardous to children, pets, livestock or wildlife. However, it should be placed away from food stuffs and kept out of reach of children and animals.

When broadcast outdoors, Amdro® breaks down within one day of being exposed to the elements. When applied within bait stations or under shelter, Amdro® can remain effective for up to 12 weeks.

3. Post-treatment monitoring

Post-treatment monitoring surveys will be undertaken in all infested areas 3 to 4 months after treatment. All persistent infestations, outdoors and indoors, will be re-treated as soon as possible until eradication has been achieved (i.e. when no Big-headed Ants are found for two consecutive years).

Once eradicated, the Island's quarantine measures will be further enforced to minimise the risk of reinfestation.

All residents will be contacted before any surveys, treatments or monitoring are undertaken on their properties.

All treatment works will be undertaken in accordance with the 'Lord Howe Island Pesticide Use Notification Plan' and 'Material Safety Data Sheet', see www.lhib.nsw.gov.au.

CSIRO: Commonwealth Scientific and Industrial Research Organisation.

Anyone wishing to contact the LHIB to discuss the eradication plan can contact Christo Haselden (Ranger) or Hank Bower (Manager Environment/World Heritage): christo.haselden@lhib.nsw.gov.au or hank.bower@lhib.nsw.gov.au.

Copies of this document are available in alternative formats upon request.

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