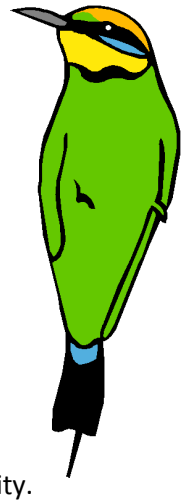
GARDEN FOR WILDLIFE



Big-Headed Ants

Photograph by: R.H. Scheffrahn, University of Florida

They're small and they don't bite.

So why are Big Headed Ants an ecological and domestic nuisance?

Firstly, they're an aggressive species that kill of many other native insect species, particularly affecting native ant diversity. They affect native ants through direct predation, and through competition for food sources. Central Australia has a large number of native ants, all of which play a role in ecosystem functioning. The burrowing of native ants helps to aerate soil, their foraging adds nutrients to the soil and they assist in the break-down of organic matter, which benefits other plants and animals. Certain species also collect seed from various Australian plants and transport them underground, offering protection from predation by animals and harsh environmental conditions. A garden with a wide range of native ant species is a healthy garden!

Secondly, they invade housing and cause infrastructural damage by chewing through electrical wiring and the grout between tiles and pavers. In severe infestations, Big Headed Ants have been found in beds, linen cupboards, pantries and washing machines.

So where did these pesky ants come from? And what do they look like- how big are their heads? And what's the best way to get rid of them? Well...read on...

The Big Headed Ant is an introduced species thought to have originated in South Africa. It is now widespread in temperate and tropical areas, however in arid environments such as Alice Springs it is found around human habitation in areas where moisture is more abundant.

Big Headed Ant's were first identified in Central Australia in the early 1990's, thought to have been transported by items such as nursery supplies, equipment and furniture from Darwin and the Eastern seaboard. The Big Headed Ant project was initiated by the Threatened Species Network in 2005 to raise local awareness about these feral ants and their impacts, and to try to limit their

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spread in Alice Springs. The current NRETAS 'Invasive Ants' project encourages the public to collect suspect ants to get them identified, and is mapping existing distribution of the BHA and other feral ant species throughout the NT.

There are two sizes of worker ants in Big Headed Ant colonies. Both are slightly smaller than the Common Black Ant (those small, trail-forming black meat ants with vicious little bites you've undoubtedly had feasting on your legs at some point), and are light ginger brown to dark reddish brown. Under a microscope you can see they have sparse, long hairs covering an otherwise smooth and shiny exoskeleton. They move slowly in comparison to many native ants. They have no smell when crushed, unlike the Common Black Ant, which has a distinct acetone-like smell (try it!). Their bite is not painful to human beings.

The minor workers, which form the majority of the ant population, do not have large heads, and are 2-3mm long. The major workers are slightly larger than the minor workers (3-4mm long) and have a disproportionately large head. They make up roughly one in every hundred ants.

Big-Headed Ants. Minor and major workers.
http://anic.ento.csiro.au/ants/biota_details.aspx?BiotaID=38504

Another indicator of Big Headed Ant presence is a reduction in the native ant population in your garden. If you've previously noticed a variety of species on ants on your block, which seem to have been usurped by ants of the above description, it's time to get them identified!

So what do Big Headed Ants like? Big Headed Ants are attracted to sources of moisture. They are scavengers but prefer fats and proteins to sweet food. Inside they forage for meats, grease, liver, molasses, peanut butter and pet foods. Outside they feed on small vertebrates, seeds and other insects. This is bad for insectivorous species whose food supply is largely reduced by the presence of the ants.

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Big Headed Ant nests are also important in identification. There are multiple queens per nest and nests are interconnected. Big headed ant nests are generally not raised unlike the elaborate nests many native ants make. They are easily observed because of the ant's prolific soil moving activities. Nests characterised by lines of interconnected holes and small mounds of excavated soil. They have many openings close to one another. Piles of bodies of dead ants are often found near nest entrances. Ants from new and old nests cooperate, rather than compete like 'normal' ants, allowing super colonies to appear

Big Headed Ants often nest in lawns, in between pavers or cracks in concrete and in tile grout. They will construct mud-tubes on foundations, which look similar to termite tunnels. They need a source of moisture to survive, so are often found in pot plants or along dripper lines.

Examples of Big Headed Ant nests

Images sourced from the University of Nebraska website and the TSN CSIRO big-headed ant poster.

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So, what to do if you suspect you may have a Big Headed Ant infestation?

Firstly, get the ants and nests positively identified. Contact your Garden for Wildlife coordinator on (08) 89 555 222 or lfw@lowecol.com.au , or the NRETAS Invasive Ant Project on (08) 8995 5036 to order collection kits and jars. If you do find you have Big Headed Ants, they can be treated with Amdro, a hydramethylon based granular ant bait. Alternatively, get in contact with a local pest control company who can treat them for you. Try to coordinate treatment with neighbouring properties to reduce chances of re-infestation.

However the most valuable and easiest way to control Big Headed Ant infestations is by preventing their spread through the movement of infested pot plants, gardening supplies and in household items. Because Queen Ants are unable to fly, their dispersal is dependant on accidental transport by people. A reproductive queen and at least 10 minor workers are required for a new colony to survive. This need for a certain initial population size means that vigilance for the presence of ants in goods being moved reduces the ability of the ant to be spread effectively by people.

Thoroughly check any material you bring into your garden that may contain soil. Get any suspect ants or nests identified immediately and be prompt to treat infestations.

You can help stop the spread of Big Headed Ants in Alice Springs, by inspecting your garden for their presence, and getting neighbours and friends to keep their eyes open for the pest.

Hoffmann, B. 2004. *Pest ants and their management on Aboriginal lands in the Northern Territory*, A consultancy report prepared for the Northern Land Council, December 2004.

Threatened Species Network, 2006. *The Feral Big Headed Ant: Recognising Big Headed Ants and their Nests,* Big Headed Ant Power Point, March 2006.

Young, G. 2000. 'The Coastal Brown or Big Headed Ant', *Agnote,* No. 152, March 2000

Get ready for your Autumn plantings!
Olive Pink Botanic Gardens will hold its first native plant sale of the year on the 21st of March. It's the perfect place to pick up a wide range of plant species, including some hard-to-find and rare species. All are local to within 200km of Alice Springs. 8-11am. A reminder notice will be sent closer to the date. Check the list of plants in your GFW kit to see what species are appropriate to the land type you live in.

Newsletter articles
If you'd like to contribute something to an upcoming Garden for Wildlife newsletter, whether it be an article, or a short gardening-tip, or a special photograph please send it through to Garden for Wildlife coordinator on lfw@lowecol.com.au or call (08) 89 555 222

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