Australian Government
Department of Sustainability, Environment, Water, Population and Communities

TRAMP ANTS

Tramp ants are a diverse group of invasive ant species which have become established widely across the globe. They arrive in Australia through many transport pathways, and once here can affect ecosystems, social and cultural values, and human health. At least six tramp ant species have national priority for management because of their impact or potential impact on biodiversity. Management activities to minimise their damage include preventing entry, monitoring high-risk areas, removing new invaders, and dealing with existing incursions.

History

Increasing trade and commerce have led to the unintended transport of ants across the world: perhaps more than 200 species to date. Ants can be moved in containers, soil, plants, timber and on machinery—even by passengers carrying plant matter. They are found in ships, planes and a range of cargoes.

Six tramp ant species have been identified as those most likely to cause major impacts in Australia (Table 1), due to their history of invasion, effects outside native ranges and suitability of our climate.

BIO65.0911

Table 1: Significant tramp ant species in Australia

Common name	Scientific name	Origin	Australian Status
Red imported fire ant	*Solenopsis invicta*	Pantanal Region of Brazil	Localised incursions (Qld)
Yellow crazy ant	*Anoplolepis gracilipes*	Possibly Africa	Localised incursions (Qld, NT, Christmas Island)
African big-headed ant or coastal brown ant	*Pheidole megacephala*	Southern Africa	Widely established (WA, NT, Qld, NSW)
Argentine ant	*Linepithema humile*	Argentina	Widely established (WA, SA, Vic, NSW, Tas, ACT)
Electric ant or little fire ant	*Wasmannia auropunctata*	Central and South America	Localised incursions (Qld)
Tropical fire ant	*Solenopsis geminata*	Possibly South America	Localised incursions (NT, Christmas Island, Cocos Island, Ashmore Reef)

Ecology

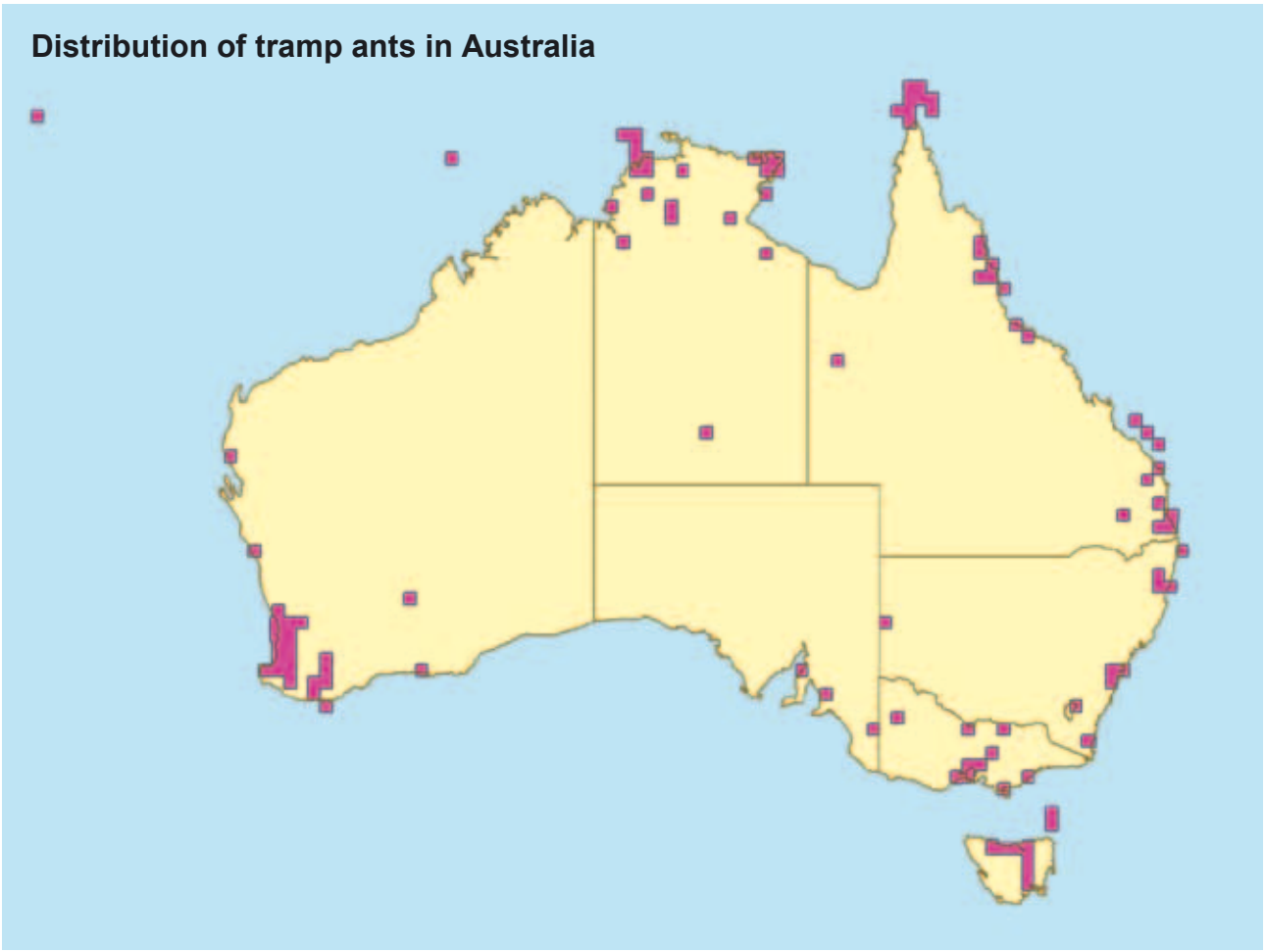
Ants are one of the most successful animal groups, with at least 15 000 species worldwide. They fill key functional roles—as predators, herbivores, seed eaters, seed dispersers and scavengers and can shape ecosystem structure.

Tramp ants are aggressive and competitive, able to dominate food sources and are easily dispersed by humans. Their broad diets, nesting habits, ability to breed rapidly, high densities and adaptability to varied habitats make them excellent invaders. Some shelter under leaf litter or rocks and debris. Others build nests as dome-shaped mounds or under timber, logs, rocks or pavers.

Certain tramp ant species can form ‘supercolonies’ with multiple queens that allow rapid and extensive colonisation. Some spread by budding – where new colonies radiate out from existing colonies, or by winged ants flying from the colony.

Tramp ants have a wide and varied diet. They can prey on litter and canopy fauna, from small invertebrates including centipedes, worms, molluscs, spiders and insects to land crabs, birds, frogs, mammals and reptiles. Red imported fire ants have a painful sting, whilst yellow crazy ants subdue and kill prey by spraying formic acid. Tramp ants can also harvest seeds and feed on plant nectar and honeydew excreted by aphids and scale insects on trees and shrubs. Some tramp ants will ‘farm’ the aphids and scale insects by tending to their needs and protecting them.

Distribution of tramp ants in Australia



Sources: Produced by the Environmental Resources Information Network, Australian Government, Department of Sustainability, Environment, Water, Population and Communities, December 2011.

Impact

Tramp ants can reduce species diversity, modify habitat structure and alter ecosystem processes. They replace native small predators, and some can repel larger predators. Insect-feeding mammals, birds, reptiles and frogs decline as they have little to eat, are stung or eaten. Tramp ants displace native ants and eat the eggs and larvae of species such as butterflies. They disrupt invertebrate food webs and affect plant pollination and seed dispersal. They damage plants by eating fruit and seeds, tunnelling into stems and removing bark from seedlings, and can increase weed invasion.

The severity of environmental impacts is illustrated by the yellow crazy ant on Christmas Island. Native land crabs, birds and reptiles are at risk from predation, habitat alteration or reduced resources. The yellow crazy ant have displaced or killed 15–20 million land crabs. This affects seedling recruitment, weed spread and leaf litter breakdown in the forest. The resultant scale insect outbreaks have also led to forest canopy dieback.

Tramp ants can also affect industries, households and human health. Agricultural impacts include damage to crops and equipment, and increases in crop pests and diseases. They sting people, stock and pets and induce anaphylactic shock in some people. Tramp ants infest furniture, food and electrical equipment, and chew on wiring. They can render parks and gardens unusable.

Control

The highest priority is to prevent any further entry and spread of tramp ants. Surveillance for new arrivals and preparation for eradication is important. Both off-shore and at-border inspections for potential contaminants, such as tramp ants, are made by the Australian Quarantine and Inspection Service. Strong public awareness and quick reporting of incursions is also needed. Once detected, rapid containment and eradication is required. Control methods used on tramp ants include baiting colonies with insecticides and/or insect growth regulators.

In Australia, eradication and control programs include: the electric ant in Cairns Queensland; the African big-headed ant in the Northern Territory; the yellow crazy ant in Queensland and the Northern Territory; the yellow crazy ant on Christmas Island and the argentine ant on Norfolk Island. A major control program aims to eradicate the red imported fire ant from Brisbane. There is a declared Pest Quarantine Area around Brisbane and the red imported fire ant is a notifiable pest requiring reporting if discovered in New South Wales or Queensland. Monitoring at the Queensland border mainly relates to nurseries and the transport industry.

How the Australian Government is dealing with a national problem

The Australian Government is preventing and detecting the entry of tramp ants through import restrictions and inspections, and is involved in eradicating existing incursions. Under the *Quarantine Act 1908* and the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) there are restrictions on importing goods, equipment and live materials into Australia. The Australian Quarantine and Inspection Service conducts inspections to detect accidental arrivals. More information about quarantine and import requirements can be found at www.aqis.gov.au

The Australian, state and territory governments have jointly funded tramp ant eradication attempts, including the red imported fire ant and electric ant programs in Queensland. Programs on Commonwealth managed land, such as in Kakadu National Park and on Christmas Island, are conducted by the Australian Government.

Under the EPBC Act the impacts of the red imported fire ant and the yellow crazy ant have been listed as key threatening processes. In consultation with the states and territories the Australian Government has developed the *Threat Abatement Plan to reduce the impacts of tramp ants on biodiversity in Australia and its territories:* www.environment.gov.au/biodiversity/threatened/publications/tap/trampants.html

The threat abatement plan provides a national framework to guide and coordinate Australia's response to tramp ants. The aim is to mitigate the potential impact of tramp ants on native biodiversity by:

- increasing knowledge and improving access to information
- increasing diagnostic capacity, surveillance, inspection and treatment
- developing contingency plans for pathways of introduction
- improving reporting and response rates
- educating and informing the community about the impacts and means of response
- co-ordinating government and local management activities in Australia and the region.

How to identify tramp ants and what to do if you find some

Tramp ant species can easily be confused with other introduced ants, and with some local native ants. In some tramp ant species all workers are identical (monomorphic) for example, electric ant, while in others they may vary a great deal, for example, red imported fire ant. Tramp ants range from 1.5 mm to more than 6 mm in size, and they can be yellow to coppery and dark brown colours. African big headed ant individuals may vary from pale yellow to very dark brown. Information on the identification of ants is available online from:

- The Pests and Diseases Image Library www.padil.gov.au

or

- Australian ants online, CSIRO entomology http://anic.ento.csiro.au/ants

Information on yellow crazy ants on Christmas Island is at: www.environment.gov.au/parks/christmas/nature-science/fauna/crazy-ants.html

Information on red imported fire ants and yellow crazy ants in Queensland, including what to do if you are stung or if you think you have seen these tramp ants, is available from the Queensland Government website (below). The key advice is to avoid contact with the ants. www.dpi.qld.gov.au/4790_6653.htm

If you believe you may have seen tramp ants, **report them** by calling Biosecurity Queensland on 13 25 23.

For areas outside Queensland, if you believe you may have seen tramp ants, report them by calling the National Exotic Pest Hotline on **1800 884 881**.

For detailed information on tramp ant species (and other invaders) see the Global Invasive Species Database: www.issg.org/database/welcome/

For further information, contact:

Department of Sustainability, Environment, Water, Population and Communities
GPO Box 787
Canberra ACT 2601
Phone: 1800 803 772
Web site: www.environment.gov.au/biodiversity/invasive/index.html

InvasiveSpecies@environment.gov.au

Photo credits in order: Yellow Crazy Ant (Sarnat, E. M.), Fire ants attacking a grasshopper (Steve Wilson), Fire ant (Steve Wilson), Tropical Fire Ant (Sarnat, E. M.)

© Commonwealth of Australia 2012
This work is copyright. You may download, display, print and reproduce this material in unaltered form only (retaining this notice) for your personal, non-commercial use or use within your organisation. Apart from any use as permitted under the Copyright Act 1968, all other rights are reserved. Requests and enquiries concerning reproduction and rights should be addressed to Department of Sustainability, Environment, Water, Population and Communities, Public Affairs, GPO Box 787 Canberra ACT 2601 or email public.affairs@environment.gov.au

Disclaimers
The views and opinions expressed in this publication are those of the authors and do not necessarily reflect those of the Australian Government or the Minister for Sustainability, Environment, Water, Population and Communities.