

# Australia in the Firing Line from Fire Ants

**Reece Pianta, Invasive Species Council** 

The sports ground is closed. The playground is not open to the public. Our BBQ has been cancelled. We found fire ants (Solenopsis invicta). This will be a new Australian experience if fire ants continue to breach containment. It is already a reality in southern Queensland. These invader ants are damaging farmlands and closing parks, sports fields, and businesses.

Fire ants will be a multi-billion dollar hit to Australia's economy. They will cause 140,000 medical appointments each year. Fire ant attacks can be fatal to humans. Overseas, fire ants are causing agricultural land to become unviable. Impacts on the economy, agriculture, and social amenity from fire ants are well publicised. The idea of marauding hordes of ants spreading out from south-east Queensland has captured the attention and imagination of media and the public alike. But – what would fire ants mean for Australia's natural environment?

### **Unbelievable Environmental Impacts**

It is hard to convey potential environmental impacts from fire ants without seeming hyperbolic. Fire ants will be devastating to our environment and will push some species to the brink of extinction. They are listed as a key threatening process under the Environment Protection and Biodiversity Conservation Act 1999. They are successful survivalists with an uncanny ability to consume a wide range of plants and animals.

Australian Government research has mapped the impact of fire ants on the south-east Queensland biosphere. If fire ants had not been controlled or suppression work stopped, they would cause population declines in 45 percent of birds, 38 percent of mammals, 69 percent of reptiles and 95 percent of amphibians. Along with impacts on animals, fire ants feed on plant stem and root systems and have a symbiotic relationship with aphids, which can also be detrimental to healthy vegetation.

Ground-nesting birds, such as the critically endangered plains wanderer (*Pedionomus torquatus*), and animals that burrow or forage at ground level will be the most impacted by fire ant invasions. While fire ants are not well adapted to heavy canopy forest environments, almost all of Australia is climatically suitable for infestation. In the United States, fire ants are proving extremely adaptable – unexpectedly moving into colder areas where viable infestation was not expected. Climate change will accelerate this habitat expansion.

Fire ants in Australia have been found on Minjerribah (North Stradbroke Island). This was unexpected as the sandy soil on the island is not ideal habitat for fire ants. Over one hundred nests have now been found at old mine sites, a worrying development for other ecologically sensitive offshore islands. This invasion mirrors the American experience of fire ants in Florida, where turtle nesting grounds are threatened by infestation.

## A Case Study of a Failed Response

It was a shock to see a fire ant sign at the local park I took my daughter to. It was a clear indicator that the infestation had not been successfully contained since major eradication efforts resumed in 2017. If it had happened here, maybe it was happening across the fire ant biosecurity area.

Fire ants in Australia are spreading at a rate of five kilometres per year. In the United States, they are spreading at forty-eight kilometres per year. In China, the annual rate is eighty kilometres.

**Top:** A red imported fire ant (*Solenopsis invicta*) head. Image: www.antweb.org – CC BY-SA 3.0.



A fire ant nest in Queensland. Fire ant nests have no obvious entry or exit holes and vary in height and shape. Image: Andrew Cox.



Critically endangered plains wanderers (*Pedionomus torquatus*) are just one of Australia's many small, ground-dwelling native species that would be particularly susceptible to fire ants. Image: Alex Pike.

Nests discovered outside biosecurity zone Morayfield Minjerribah Toowoomba Fire ant biosecurity Fire ant zone 2 biosecurity zone 1 **Gold Coast** Mt Lindesay Hwy Murwillumbah **NSW Byron Bay** 

Fire ant (Solenopsis invicta) biosecurity zones 2023. Image: Invasive Species Council.

This differential is an endorsement of the tactics being used in Australia for suppression and control. It is evidence, however, of the failed goal of fire ant eradication. So far, Australia's governments have spent \$740 million in pursuit of fire ant eradication over twenty years. This funding has been inconsistent and slow to arrive in response to expert advice.

For example, in 2015, a report called for an urgent boost in fire ant eradication resources in line with a new response plan. Funding was not deployed on the ground until 2018. By this time, fire ants had surged and spread. In 2021, the alarm was raised again, and the fire ant plan needed urgent revisions. Two years later, governments are still considering their response.

Fire ants are not waiting for government budget cycles. In six weeks in winter 2023, six fire ant containment breaches occurred. Every mainland state has had fire ant incursions over the past decade. In mid-2023, fire ants were detected within five kilometres of the New South Wales border and were found west of the Great Dividing Range at Kleinton. Now, fire ants have spread into New South Wales at Minjerribah and south of Ballina.



Join the fire ant (*Solenopsis invicta*) fighters. Image: Invasive Species Council.



Reece Pianta, Invasive Species Council's Fire Ant Campaigner, has been a long-time advocate for fire ant action.

Fire ant queens can fly five kilometres to create new nests. Fire ants form rafts during flood events to reach new areas. Fire ants will spread quickly throughout the eastern states if they enter the Murray Darling River basin. Fire ants cross oceans and continents in cargo – soil, fodder, and hay bales are ideal carrier materials. In wet or dry conditions, fire ants will continue their march across Australia unless containment and eradication efforts are ramped up.

We are at a crucial moment for fire ant eradication efforts in Australia. Governments need to move much faster and understand the timesensitive nature of the threat we face.

#### A Narrow Path to Fire Ant Freedom

Australia has been the most successful country in the world at dealing with fire ants. This is despite the sporadic, underfunded, and late response to this aggressive invasive species.

The tactics work – direct nest injection, baiting and community surveillance have slowed their spread. Eradication has been successful in every place they have been found in Australia. The last remaining and largest fire ant stronghold is in southern Queensland.

The 2021 review indicated that at least \$200 million per year was required to successfully eradicate fire ants in Australia. The Invasive Species Council supports

Red imported fire ant (Solenopsis invicta) raft. Image: Stevenw12339.



the government's new response plan – a comprehensive horseshoe to contain and eradicate fire ants. It is a plan for eradication within ten years, but it needs to be funded. According to the review, \$593 million has been provided over the next four years – less than half the required amount.

#### **Our Fire Ant Future**

Australia is at a crossroads. The fire ant future that scientists have predicted is coming true. Every night, the Gold Coast news carries reports of a new sports field, showground, beach, park, or school closed because of fire ants. If they take hold, farmers and local governments will bear a new burden, but who will manage fire ants in nature? The truth is fire ants will run amok in national parks, reserves, and wilderness areas. The cost to the industry will be huge. The cost to the environment will be devastating. Join our call for urgent government fire ant action.



A preserved red imported fire ant (Solenopsis invicta). Image: April Noble via antweb.org