

INVASIVE SPECIES SOLUTIONS TRUST

More than 1,250 (eight in ten) of Australia's land-based threatened species are jeopardized by invasive species. Much of the blame rests with 207 weed species, 57 invasive animals and three pathogens. Current tools and strategies are working but for the sake of the threatened species that will be lost, more must be done urgently.



invasives.com.au

The Invasive Species Solutions Trust is the philanthropic arm of The Centre



CENTRE FOR
INVASIVE SPECIES SOLUTIONS



The Issue

Seventy-three species of introduced vertebrates roam our continent, including 25 mammals, 20 birds, four reptiles, one amphibian and at least 23 freshwater fish. Three pests (rabbits, pigs, cats) and an endemic plant pathogen known as *Phytophthora cinnamomi*, threaten more than 800 threatened species.

Primary producers are affected by stock damage and losses from carnivorous invasive species (such as feral dogs and foxes) and damage to grazing land and crops from invasive weeds and herbivorous invasive species (such as rabbits and feral deer).

Australia is burdened with more than 2,700 weeds, making up about 12% of our flora, a higher proportion than in any other continent. About 20 new weed species have been establishing each year – or one new weed every 18 days.

The financial cost is already enormous. Invasive species – predominantly weeds, cats, rabbits, and fire ants – are conservatively estimated to have cost Australia \$390 billion over the past 60 years in impacts and control measures. This cost will grow markedly if new pests, weeds, and diseases are able to invade Australia.

The Solution

Australia's original Quarantine Act is more than 100 years ago and was one of the first pieces of quarantine legislation in the world. To date, keeping out unwanted arrivals has depended on effective border security and, while we have not completely shut the gate, we are beginning to turn the tide.

Australia is a world leader in developing pest and weed solutions, such as biocontrol agents and baits. Success stories include the control of prickly pear, a cactus which once infested 240,000 square kms of Queensland and New South Wales but has been at insignificant levels for the past 80 years. The rabbit biological control program has also been highly successful, leading to far fewer rabbits and reduced impacts since the first biocontrol agent was released in 1950.

We need to take advantage of new genetic and digital technologies to create cheaper and simpler solutions for the 21st century that can find and manage invasive species quickly.

These new technologies have the potential to be game changers in how we tackle pests and weeds in the future.

Leading the charge in developing new tools and strategies is the Centre for Invasive Species Solutions. Through scientific endeavour the Centre is working collaboratively to develop research based solutions that ethically and humanely reduce the impact of invasive pests and weeds on our environment, our primary producers and our threatened species. Then through a successful National Co-ordination adoption model, our research is being directly applied where the threats are greatest.

PLEASE JOIN US



The Centre is creating a formidable team to undertake the challenge of controlling invasive pests and weeds. Governments, Industry Associations and Research Institutions are on board. Progress is being made but your support can help us to speed up solutions and protect threatened species who will become extinct without urgent intervention.

Your donation through the Invasive Species Solutions Trust will contribute to the protection of our environment, our threatened species, and our primary production. To donate click on this QR code or go to our website invasives.com.au.

A Summary of our achievements

National Wild Dog Coordinator appointed.
The first ever position to educate and coordinate a strategic, consistent, nil-tenure approach to wild dog management at a national level using best practice management. Culminates in development of National The Wild Dog Action Plan.

2007

2008

PigOut® 1080 Feral Pig Bait launched.
World's first manufactured feral pig bait.

The HogHopper™ launched.
Highly target specific bait delivery device for feral pig control.

2010

2011

Tilapia specific eDNA detection technique developed and validated.

eDNA detection technique extended for three additional national priority pest fish: Oriental Weatherloach, Carp and Redfin Perch.

2012

2013

FeralScan 2.0 released.
By 2021 FeralScan, used by over 550 community groups and over 23,400 registered users

PestSmart 1.0 vertebrate pest best practice management website launched.

PestSmart tool kit released with supporting national roadshow.

Multi-species eDNA detection technique developed and validated.

2015

2016

Foxecute® and Dogabait® launched.
First new wild dog and fox control predator toxin (PAPP) on the commercial market. Suitable for peri-urban areas because it has an antidote.

RHDV1 K5 released nationally (March 2017).
First new rabbit biocontrol agent in 20 years. Associated national rabbit disease monitoring program wins a 2019 Australian Government biosecurity award.

2017

Carp herpes virus evaluated.
Potentially world's first carp biocontrol agent.

2018

DeerScan monitoring program launched.
DeerScan provided the first national system for reporting the presence of feral deer, the nature of deer damage and control interventions.

HOGGONE®: next generation sodium nitrite based feral pig bait launched.

WeedsAustralia 1.0 best practice management website launched.

2020

2022

Portable, real-time eDNA detection technology developed.

National Feral Deer Action Plan released, and National Coordinator appointed.

Digital surveillance of illegal wildlife trade system released.

Eradicat:
Extending WA registration to national registration.

Weedscan launched.
Computer VisionWeeds ID App

2023

National Feral Cat and Fox Management Coordinator appointed.

TESTIMONIALS



CISS Independent Performance Review March 2020

The Centre is providing an outstanding contribution to strengthening leadership for strategic direction, but also for improving connections, collaboration, and culture, in the difficult area of invasive species management – that is widely appreciated across jurisdictions and industry...

Overall, CISS is performing strongly as a new entity early in its development. It has established the governance, business processes, agreements, and is establishing the research portfolios and innovation pipelines to deliver strong national interest outcomes...

All stakeholders interviewed see an ongoing need for a nationally funded and coordinated, collaborative approach to R&D for major invasive pests and weeds.

'If we didn't have CISS, we'd need to reinvent it'.



Fiona Simson President, National Farmers Federation

In agriculture we often talk about how we don't collaborate very well, how we're an industry of many diverse moving parts. But in actual fact for me, this Centre has always been an absolutely gold plated example of how collaboration works. Collaboration between the research institutions, between industry and between government.



Andrew Cox CEO, Invasive Species Council

An investment in high-tech surveillance and other innovative biosecurity tools through the Centre will greatly benefit the Australian community and our environment. We need the innovation and tech tools to support community biosecurity surveillance and action near our ports, around our cities and towns and where pests and weeds are spreading throughout Australia.

Contact us

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