

Australian Government

Department of Agriculture, Fisheries and Forestry



Australian Biosecurity Awards 2024

AWARD RECIPIENTS

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Acknowledgements

The awards team thank the 2024 selection panel for selecting the Australian Biosecurity Award winners.

Acknowledgement of Country

We acknowledge the Traditional Custodians of Australia and their continuing connection to land and sea, waters, environment and community. We pay our respects to the Traditional Custodians of the lands we live and work on, their culture, and their Elders past and present.

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FROM THE DEPUTY SECRETARY



Congratulations to the 2024 Australian Biosecurity Award recipients. These awards celebrate the dedicated Australians working to support and promote Australia's biosecurity and the systems that underpin it.

A strong and resilient biosecurity system is critical to protecting our environment, agricultural sector and way of life. But the risks facing our biosecurity system are becoming more complex. With significant threats such as, H5N1 high pathogenicity avian influenza, on Australia's doorstep, it has never been more important to work together to strengthen our biosecurity system.

This year's group of winners demonstrate exceptional leadership and contribution. This includes Traditional Custodians managing biosecurity on Country, inspiring primary producers, trailblazing scientists and venerated industry leaders. I'm also inspired by those working to educate the community about biosecurity and protecting vulnerable locations from biosecurity threats.

I'd like to specifically congratulate the inaugural winners in the First Nations Award for Excellence in Biosecurity. There are so many positive stories in this space. This year's winners show how important First Nations people's contributions are to Australia's biosecurity, and their stories highlight the work First Nations people have done to manage biosecurity risks on Country for countless generations.

These biosecurity champions have gone above and beyond to help protect our future. Sharing their stories showcases the diverse roles we all play in our biosecurity system, promotes the importance of biosecurity and inspires excellence and best practice. Thank you to Animal Health Australia and Plant Health Australia for their continued support of the Farm Biosecurity Producer of the Year award.

Congratulations again to our 2024 winners and thank you for your outstanding and valuable contributions to ensuring and bolstering Australia's biosecurity, and protecting our nation.

Justine Saunders APM

Deputy Secretary Biosecurity, Operations and Compliance Group

The Australian Biosecurity Awards recognise individuals, groups and organisations that have shown a commitment to supporting and promoting Australia's biosecurity and the systems that underpin it.

For more information, visit agriculture.gov.au/ABA.

AWARD CATEGORIES



Dr David Banks Biosecurity Lifetime Achievement Award

Recognises an individual who has made an outstanding contribution beyond their normal responsibilities for Australian biosecurity over a sustained period of time.



Dr Kim Ritman Award for Science and Innovation

Recognises an individual who has made an outstanding contribution to biosecurity science and innovation in Australia over a number of years.



First Nations Award for Excellence in Biosecurity

Recognises Aboriginal and Torres Strait Islander individuals, groups and organisations that have made an outstanding contribution beyond their normal responsibilities to Australian biosecurity. This award recognises exceptional commitment to improving the protection of Country and people from pests, weeds and diseases.



Farm Biosecurity Producer of the Year

Recognises Australian primary producers, including individuals and organisations, that have demonstrated outstanding on-farm biosecurity practices.

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Industry

Recognises individuals, groups or organisations that have demonstrated a significant contribution to maintaining Australia's biosecurity integrity.



Government

Recognises individuals, groups or organisations that have demonstrated a significant contribution to maintaining Australia's biosecurity integrity.



Environmental Biosecurity

Recognises individuals, groups or organisations that have made a significant contribution to protecting our environment from biosecurity risks.



Community

Recognises individuals, groups or organisations that have made a significant contribution to delivering biosecurity outcomes in the community.



Education

Recognises individuals, groups or organisations that have made a significant contribution to biosecurity education.





DR DAVID BANKS BIOSECURITY LIFETIME ACHIEVEMENT AWARD

Dr Leslie David Sims

Dr Leslie David Sims is a highly experienced veterinarian with a passion for preventing infectious diseases of production animals, especially those that also affect humans. He started his career as a laboratory diagnostician in the Victorian public sector and used these experiences, with Dr John Glastonbury and others, to produce a widely used diagnostic guidebook on pig diseases for the Australian pig industry.

Dr Sims is internationally recognised for his expertise in avian influenza. In 1997, the first global outbreak of H5N1 HPAI occurred in Hong Kong – affecting people and poultry. Dr Sims led the local response that culminated in the eradication of that strain of virus. He developed pragmatic and sensible biosecurity measures locally to prevent the return of other H5N1 viruses to live markets and poultry farms, including use of vaccination. He used these experiences as a consultant for the Food and Agriculture Organization of the United Nations (FAO) in multiple Asian countries, including work on World Bank avian influenza projects. He has successfully developed and advocated policies for the control and prevention of avian influenza across Southeast Asia.

Working on diseases at the human-animal interface long before it was referred to as 'One Health', Dr Sims has championed and pioneered this approach. One Health is now regarded globally as the best approach for dealing with complex disease problems. His work in this area included implementing systems for monitoring antimicrobial resistance and use in farmed animals in Hong Kong and co-production of a One Health strategic plan for Vietnam.











Dr Sims has contributed to emergency animal disease prevention and control policy in Australia, especially for foot-and-mouth disease and avian influenza. His expertise and experience with vaccine use overseas, and his deep understanding of the global animal health situation, was invaluable for informing animal health policy development in Australia. His analysis of emergency animal disease vaccines, which could be considered for use in Australia to control a wide range of emergency animal diseases, was a valuable contribution to <u>Australia's Veterinary Emergency</u> <u>Plan</u> (AUSVETPLAN). As a member of the National Avian Influenza Vaccine Expert Group, he co-developed Australia's first documented avian influenza vaccination policy and procedures.

He recently developed the concept of avian influenza vaccination stewardship that has been adopted by the FAO. This aims to enhance use of vaccines and prevention of avian influenza, especially where avian influenza viruses are endemic in poultry. He has also supported Animal Health Australia by providing detailed information on suitable vaccines against avian influenza.

With decades of dedication and unwavering determination, Dr Sims has made an outstanding contribution to Australia's biosecurity through his leadership, expertise and preparedness to share his knowledge freely. His contributions to global disease control, particularly in Southeast Asia, has reduced biosecurity risks for Australia and the region.

Dr Leslie David Sims was nominated by Kathy Gibson and Sam Hamilton from the Department of Agriculture, Fisheries and Forestry.

THE DR DAVID BANKS BIOSECURITY LIFETIME ACHIEVEMENT AWARD

is dedicated to the memory of Dr David Banks





DR KIM RITMAN AWARD FOR SCIENCE AND INNOVATION

Dr Laurence Mound

Dr Laurence Mound is a taxonomist who has made significant contributions to Australia's biosecurity and entomology during his career. He is a world-leading authority on the minute insects called thrips (*Thysanoptera*), many of which are known as crop pests and vectors of plant viruses.

Dr Mound has worked on several insect groups throughout his career but his contribution to the study of thrips has been most significant, demonstrated by his discovery and description of more than 600 species. Through this work, he revolutionised the understanding of thrips diversity around the world, particularly in Australia.

Thrips have moved across the world and continue to do so through wind, in flowers, on produce or via hitchhiking and there are many introduction pathways to Australia. Exotic species, subspecies and thrips vectors remain significant targets for Australia's border inspection and surveillance.

Dr Mound has a vast number of published works and his resources and related thrips publications are visited daily by biosecurity workers all around the world. Dr Mound worked with fellow entomologist Desley Tree to produce the core resources for any entomologist studying, identifying, researching, or perusing Australian thrips. These are both freely available online and include <u>Thysanoptera Australiensis</u> – an identification and information system to thrips in Australia, and <u>Tubulifera</u> <u>Australiensis</u> – a similar system to the <u>Phlaeothripidae</u> genera in Australia. Dr Mound's early adoption of interactive, computer-based identification keys was showcased when he developed a CD-ROM for the then Australian Quarantine and Inspection Service on Thysanoptera of quarantine importance to Australia. These keys were a driver of this technology, becoming one of the most used platforms for identification keys today. He has also produced similar information systems that help identify intercepted thrips. These systems have been issued for the known species of Britain, California, China, New Zealand and Timor-Leste.

His contribution to preparedness and response for plant health is demonstrated through his training, tuition, resource development and direct support. For example, Dr Mound hosted 3 young entomologists who went on to hold key roles in biosecurity laboratories, train others, present internationally, expand thrips collections and produce publications. Dr Mound's influence is evident in every entomology lab in Australia in advancing Australia's plant health status, whether specimens in the collection, the inquiring questions of a policy maker, or the use of the upside-down slide mounting technique he taught to others.





Dr Mound has excelled in strengthening scientific capacity and capability both domestically and internationally. His countless identification courses and co-authored scientific papers have proven invaluable for biosecurity policy and operational staff.

Dr Mound's work has had a significant and important influence on biosecurity. His work in Australia discovering and describing thrips species has laid the groundwork for the presence and absence of species, and ability to justifiably apply biosecurity measures on specific pathways.

Dr Laurence Mound was nominated by Luke Watson from the Department of Agriculture, Fisheries and Forestry.

THE DR KIM RITMAN AWARD FOR SCIENCE AND INNOVATION

is dedicated to the memory of Dr Kim Ritman





FIRST NATIONS AWARD FOR EXCELLENCE IN BIOSECURITY

This award was introduced in 2024 to recognise Aboriginal and Torres Strait Islander individuals, groups and organisations that have made an outstanding contribution beyond their normal responsibilities to Australian biosecurity. This award recognises exceptional commitment to improving the protection of Country and people from pests, weeds and diseases.







FIRST NATIONS AWARD FOR EXCELLENCE IN BIOSECURITY

Uncle Dave Wandin

Uncle Dave Wandin is a respected Elder of the Wurundjeri Woi Wurrung Tribe and Manager of the <u>Coranderrk</u> <u>Wandoon Estate</u> in Healesville, Victoria. His connection to the First Nations people of the Wurundjeri Woi Wurrung Tribe, and their community and culture, is demonstrated through his role as an adviser not only to his people, but to the wider Victorian public and policy makers.

His contributions to biosecurity include providing input into <u>Victoria's Biosecurity Strategy</u>, sharing insights as a Caring for Country panellist at Victoria's 2022 and 2023 Biosecurity Roundtables, being a spokesperson for Victoria's <u>Make a difference in biosecurity</u> campaign, and supporting community-led management of rabbits through the <u>Victorian Rabbit Action Network</u>.

Uncle Dave is also a representative member of Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation on the <u>Birrarung Council</u>. The Birrarung Council is an independent voice of the Birrarung, overseeing activities in the Birrarung Corridor in relation to the implementation of the <u>Yarra Strategic Plan</u>.







As a custodian of the land, Uncle Dave is responsible for managing the cultural heritage of Country and supporting the environmental, biosecurity and economic benefits of the Coranderrk Wandoon Estate. He contributes to managing the threat of exotic and established pests, weeds and diseases through the practices he has put in place on Coranderrk Wandoon Estate. This supports the native bushfoods enterprise, grazing cattle and conservation projects. He and his team of volunteers manage rabbits, blackberry and deer through elimination and prevention methods.

He teaches young people about Aboriginal land management practices and combines this with the latest understanding in ecology and agricultural practices to support thriving land and waters.

Uncle Dave is a deeply valued teacher of Aboriginal ways and an experienced practitioner in best practice land management. He has been a strong advocate for building awareness of biosecurity threats to Country and supporting Aboriginal communities and government agencies to come together to discuss issues.

Uncle Dave Wandin was nominated by Agriculture Victoria.







FIRST NATIONS AWARD FOR EXCELLENCE IN BIOSECURITY

Western Cape Turtle Threat Abatement Alliance

The Western Cape Turtle Threat Abatement Alliance (WCTTAA) is a partnership of 6 western Cape York Indigenous Land and Sea Ranger groups from Apudthama Land Trust/Northern Peninsula Area Regional Council, Napranum Aboriginal Shire Council, Mapoon, Pormpuraaw, Aak Puul Ngantam Cape York and Kowanyama. The west coast of Cape York provides important nesting habitat for Queensland's largest nesting population of the flatback turtle (*Natator depressus*), and significant nesting rookeries for the olive ridley (*Lepidochelys olivacea*), hawksbill (*Eretmochelys imbricata*) and green turtle (*Chelonia mydas*).

Feral pigs are widespread in Cape York Peninsula and threaten the survival of marine turtles, primarily through the predation of eggs and hatchlings from turtle nests. The WCTTAA aims to efficiently manage threats to coastal habitats and enhance survival rates of threatened and endangered marine turtle populations. The groups work together at a regional level to care for Country by protecting marine turtle nests from predation along 800 km of western Cape York beaches.

Since 2014, WCTTAA's program has been supported by the Queensland Government's <u>Nest to Oceans Turtle</u> <u>Protection Program</u>, funding Indigenous Rangers on western Cape York to undertake predator control and monitoring of turtle nest predation.











The WCTTAA program is set apart from most feral pig management programs being conducted across Australia. The key feature of the program is to reduce the impact of turtle nest predation rather than solely reducing feral pig populations. Impacts caused by feral pigs along western Cape York are tracked through the collection, recording and reporting of nest predation and survival rates of turtle hatchlings on targeted beaches. The ability of each group to collect data in a consistent way has been integral to attract and justify significant ongoing support from funding partners, stakeholders and governments, and clearly demonstrate outcomes.

In 2023, the outdated data collection system was transitioned to a new application called <u>Nestor</u>, a marine turtle nesting data collection tool. The new tool has provided GPS tracking with an inbuilt map and enables fast recording of new tracks, nests and predation events. It also includes offline images and an identification guide giving information about each turtle species, their track and nest characteristics. Easy to use and compatible on iPads, the application has become a crucial instrument for Rangers to make accurate assessments and informed decisions in conservation efforts.

The concerted efforts of the WCTTAA have led to a significant increase in threatened marine turtle hatchling survival rates in the Cape York region through reducing feral pig nest predation impacts. By implementing a combination of protection efforts and long-term control strategies, and involving local communities, the WCTTAA program has shown that clutch loss can be reduced to sustainable levels, enabling the recovery and conservation of marine turtle populations.

Western Cape Turtle Threat Abatement Alliance was nominated by Heather Channon from Australian Pork Limited.







FARM BIOSECURITY PRODUCER OF THE YEAR

Australian Prawn Farms

Located in regional Queensland, Australian Prawn Farms is committed to their role as an industry leader in biosecurity. They are a premier tiger prawn hatchery, grow-out farm and processing facility.

Despite their small workforce, the farm has generously supported the Australian Prawn Farmers Association (APFA) where president Matt West and Tony Charles (chair of APFA Research Committee) have been active committee members for over 10 years. Matt and Tony have implemented best practice biosecurity measures at Australian Prawn Farms and work tirelessly to promote the importance of biosecurity in the Australian prawn farming industry.

At Australian Prawn Farms, they ensure all inputs, including feed, water and stock are rigorously screened for prawn pathogens. They implemented a pathogen screening protocol that exceeds minimum requirements to screen broodstock, post-larvae, and pond-reared stock. All broodstock are quarantined and individually screened for pathogens prior to entry into the hatchery system. Every tank of post larvae is screened and assessed prior to transferring to the grow out section of the farm, and every pond is screened at 100 and 125 days of culture for the presence of 7 pathogens endemic to Australia.

Australian Prawn Farms employs best-practice production techniques that prioritise biosecurity. This includes funding research into the use of eDNA to detect and quantify pathogen presence in ponds and seasonal fluctuations in pathogens. On farm, they reduce risk of disease spread and ensure a healthy, thriving prawn population by maintaining optimal water quality and closely monitoring prawn health. Australian Prawn Farms applies strict exit-level biosecurity, ensuring only pathogen screened post-larvae or cooked products leave the premises.



Australian Prawn Farms demonstrates a strong commitment to training and providing career pathways to the next generation of prawn farmers. This includes hosting veterinary science students from James Cook University to support future veterinary specialist training in aquatic practice.

They have been one of the major initiators of increased communications within the prawn farming industry on the presence and impact of endemic pathogens.

Australian Prawn Farms is a model of biosecurity excellence within the prawn farming industry. Their comprehensive and proactive approach to biosecurity safeguards their operations and sets a benchmark for the entire sector. By integrating biosecurity into daily activities and maintaining rigorous standards across all areas of farm management, this organisation exemplifies best-practice preventative measures, ensuring the health and sustainability of prawn farming in Australia.

Australian Prawn Farms was nominated by Kelly Condon from James Cook University.





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FARM BIOSECURITY PRODUCER OF THE YEAR

Shayne and Blaise Cini – Karden (Qld) Pty Ltd

For Shayne and Blaise Cini of Karden (Qld) Pty Ltd (trading as Edari Bananas), on-farm biosecurity is an insurance policy for themselves and for future generations. Their 220-acre banana farm borders the South Johnstone River, which is south of Innisfail in the town of Wangan.

As fourth-generation farmers, and second-generation banana growers, Edari Bananas' eyes are firmly on farm succession and protecting their property from pests and diseases, such as Panama disease tropical race 4 (Panama TR4). With the detection of Panama TR4 in Queensland in 2015, they focused on things that could be done immediately to safeguard their farm by setting up signage, footbaths and designated entry points.

Due to their farm crossing 2 main roads, over a 3-year period they developed a strategy and plan to prevent Panama TR4, including:

- constructing 2 internal creek crossings to minimise road traffic
- designing and constructing 3 wash-down facilities at crossings within the property
- upgrading roads and installing new drainage pipes to mitigate flooding from other adjacent properties
- fencing around the entire property
- installing 3 boot spray facilities at access points.



While Panama TR4 remains contained to the Tully Valley, the efforts of Shayne, Blaise and their team demonstrate forward-thinking and preventative measures that go above and beyond what might be expected. Implementing on-farm biosecurity measures continues to be the best defence against Panama TR4 and a range of other pests and diseases.

With the future firmly in mind, Blaise developed a series of biosecurity training videos for staff inductions and as an ongoing resource for the team. The team contributed to a series of videos produced by Biosecurity Queensland and the Australian Banana Growers' Council designed to target other growers, potential farm workers and visitors to their region. They also implemented a visitor register, signage (internal and external) and a feral pig management program to reduce environmental damage.

The effort Edari Bananas made on their Wangan farm and ensuring other growers and the broader community are better informed about biosecurity, demonstrates their ongoing commitment to the cause.

Shayne and Blaise Cini were nominated by Amy Spear from the Australian Banana Growers' Council.





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John Park

In a career spanning almost 60 years, John Park has played a significant role in reforms in the Australian international trade sector with a dedication to biosecurity integrity.

John began his career in 1967 with Rudders Customs Agency (who would eventually become a division of TNT), advancing to become a licenced customs broker in 1980 and performing a range of executive roles over 30 years. As National Customs Manager at TNT, John had a prominent role in representing the broader interests of the then emerging express courier sector, in effect being the precursor representation to the Conference of Asia-Pacific Express Carriers (CAPEC) – a prominent representative body that was later formalised in 2000.

Post his TNT days, John undertook contract work with several customs brokerages. During this time, John became the inaugural Western Australian Regional Manager for the then Customs Brokers and Forwarders Council of Australia Inc (CBFCA), representing members' interests in statutory reporting and local logistics matters.

In June 2019, John took on a national role at <u>Freight &</u> <u>Trade Alliance</u> (FTA)/Australian Peak Shippers Association (APSA) as Head of Business Operations. Here, he co-designed and provided industry support on biosecurity reforms to manage brown marmorated stink bug (BMSB) and khapra beetle. He actively engages with FTA/APSA members and professionally represents the customs brokerage/freight forwarding and logistics industry.







In July 2020, John was the founding secretary of the Biosecurity Treatment Provider Reference Group (BTPRG), which is open to members from onshore biosecurity treatment providers (Approved Arrangements: 12.1 Methyl Bromide Fumigation, 12.2 Sulfuryl Fluoride Fumigation and 12.3 Heat Treatment). The BTPRG aims to collaborate with the department to deliver nationally consistent communication and support to onshore biosecurity treatment providers to develop practical compliance assurances that satisfy departmental requirements.

John has worked collaboratively with the department for many years to manage and reduce biosecurity risks. John has been a strong advocate for industry, working with the biosecurity operations staff to ensure industry concerns have been heard, particularly with relation to document and assessment processes, leading industry representation over the periods of significant operational changes.

John played a prominent role in a co-design project between FTA, APSA and the department to design an application, and associated processes, to improve packing and sea freight container inspections, aligned with the international guidelines for packing goods into Cargo Transport Units.

As a trusted expert, he raises biosecurity awareness among Australian importers, depots and logistics providers and actively promotes treatment and safeguarding measures offshore. He works tirelessly to educate a diverse industry through guidance, ongoing collaboration and organising presentations to members on biosecurity measures. John has been a strong and effective advocate throughout his career, playing a key role in protecting and promoting Australia's biosecurity.

John Park was nominated by Paul Zalai from Freight & Trade Alliance (FTA) and the Australian Peak Shippers Association (APSA).







Biosecurity Queensland African swine fever prevention and preparedness project

Biosecurity Queensland is recognised for initiating the African swine fever (ASF) preparedness and prevention project (PPP) in June 2020, in response to the spread of ASF in Asia and the increasing risk to Australia. The project delivered a range of benefits, including:

- supporting the prevention of an ASF incursion in Queensland
- enhanced surveillance for early detection of a potential incursion
- preparedness for an ASF incident response
- stronger relationships with stakeholders
- greater coordination across local, state and federal government.

The project scope was extended in June 2022 to include emergency animal disease (EAD) preparedness in response to the increased threat of foot-and-mouth disease (FMD) and lumpy skin disease (LSD).





Biosecurity Queensland engaged with the pig industry, local government and community stakeholders to collaboratively enhance EAD prevention, early detection and response preparedness. Training and engagement initiatives included:

- developing awareness materials and delivering a social media campaign that targeted culturally and linguistically diverse and Indigenous communities
- developing eLearning courses on:
 - ASF prevention and early detection
 - ASF surveillance and sampling
- delivery of workshops to a broad range of stakeholders to enhance stakeholder networks.

The project delivered a range of online response-ready tools and included virtual and face-to-face exercises to enhance government and industry response preparedness.

The project delivered an upgrade of the Queensland Biosecurity Sciences Laboratory information management system, providing the flexibility to scale-up at short notice, enabling faster, more consistent and reliable processing of samples during EAD responses. The project provided practical workshops to support stakeholders' ability to collaboratively manage feral pigs at the landscape level. Spatial modelling research provided data about feral habitat suitability, landscape use and response to control measures, providing valuable information supporting disease spread models. The project built internal capacity to undertake aerial surveillance activities in an EAD outbreak affecting feral animal populations, including feral pigs.

A grant program supported local governments to develop EAD response plans for integration into their disaster management plans, informed by a collaborative desktop exercise using an ASF response scenario. Grant funding is also supporting ongoing spatial data collection to evaluate the risks of EAD transmission between feral and domestic pig populations and to assess feral pig habitat modelling data for practical application in control programs.

The ASF PPP was completed in June 2024 and received highly positive feedback from stakeholders, who recognised the project's success in delivering practical initiatives supporting EAD preparedness with a strong focus on collaboration with other state and national government agencies, Indigenous stakeholders and the pig industry sector. The project outcomes and the enduring relationships built have achieved improved biosecurity outcomes and made an outstanding contribution to protecting animal health across Queensland and Australia.

The Biosecurity Queensland African swine fever prevention and preparedness project was nominated by Ian McDonald formerly of Animal Health Australia.





Brisbane City Council Keep Moreton Island (Mulgumpin) Cane Toad Free

Keeping Moreton Island Cane Toad Free is no easy task. But that hasn't stopped Brisbane City Council and their partners from doing just that.

More than 170,000 people visit the island via boat or barge each year, increasing the risk of a cane toad incursion. As no cane toads were established or breeding on the island, the program focused on preventing incursions and asset protection.

Moreton Island is the third largest sand island in the world and is located 40 km north-east of Brisbane. Most of the island is within Moreton Bay Ramsar Site, which is recognised for its important wetlands, salt marsh, tidal flats, sandy beaches and freshwater lakes. The island supports a variety of species adapted to these unique conditions, including iconic marine animals, terrestrial mammal species, reptiles, amphibians and birds.

Separation from the mainland has preserved the integrity of Moreton Island. However, the greatest threat to the island's wildlife is the risk that <u>cane toads</u> will become established. On the mainland, cane toads are considered naturalised, and eradication is currently unfeasible. As cane toads are toxic at all life stages, they are a lethal threat to predators that mistake them for native frogs. Eggs and tadpoles are toxic to fish, and toadlets and adult toads are toxic to birds and reptiles.









Recognising that the most likely way cane toads will establish is via human assisted movement, Brisbane City Council developed an educational campaign targeting island visitors and via public engagement at Council events. The program encourages all island residents and visitors to be vigilant when unpacking their camping gear, building materials and other supplies transported from the mainland, and to support surveillance efforts when travelling around the island, improving the chance of detecting cane toads in remote locations.

Brisbane City Council established partnerships with the Queensland Parks and Wildlife Service, First Nations custodians, Tangalooma Island Resort, Moreton Island Adventures, local residents and the Moreton Island Protection Committee. These networks allowed them to maintain consistent messaging and increased their reach. The program has since expanded to explore and deploy innovations and tools to further reduce the risk posed by cane toads, with detection dogs undertaking surveys to sniff out these toxic pests and eDNA surveying of water bodies to look for microscopic presence of cane toads. Several technologies are on standby should an incursion response need to be activated.

The Quandamooka Peoples are First Nations custodians of the region, and in 2019, the Federal Court of Australia recognised their native title rights and interests over Moreton Island, which is now known by its traditional name, Mulgumpin, meaning place of sandhills. They have authorised and supported the continued delivery of the campaign to Keep Mulgumpin (Moreton Island) Cane Toad Free.

This program demonstrates how collaboration between residents, businesses, visitors, volunteers, Native Title custodians, and the state and local government can deliver positive biosecurity outcomes and protect iconic and genetically natural assets.

Keep Moreton Island Cane Toad Free was nominated by Rachel Cage from Brisbane City Council.







Dr Michelle Wille

Dr Michelle Wille has made an exceptional contribution to reducing the risks posed to the environment and social amenity by ensuring key stakeholders in government and non-government agencies are aware and prepared for high pathogenicity avian influenza H5N1.

High pathogenicity avian influenza (HPAI) virus is a pathogen on <u>Australia's National Priority List of Exotic</u> <u>Environmental Pests</u>, <u>Weeds and Diseases</u>. HPAI H5N1 has caused a global panzootic, with ongoing outbreaks of disease in wild birds, poultry and mammals since 2021. The emergence of the 2.3.4.4b strain overseas, high activity across a broad group of animals, and long distance spread means there is an increased risk to Australia.

Dr Wille provided significant expertise and scientific assessment to determine Australia's vulnerability to HPAI. The risk assessment highlighted the significant impact this pathogen could have on Australia's unique fauna. Through her scientific endeavours and multiple advisory roles, she promotes networks and collaborations and takes a One Health approach.

With critical new knowledge and tools to improve environmental biosecurity, Dr Wille initiated enhanced wildlife surveillance for HPAI in 2022 and repeated it again in 2023. This was done by sampling more than 1,000 shorebirds and sea birds around Australia, in collaboration with Dr Marcel Klaassen and with help from bird conservation organisations. Dr Wille's enhanced surveillance program will continue through spring 2024 to exclude the arrival of HPAI H5N1 with migratory shorebirds.





Dr Wille engages with diverse audiences using a variety of platforms and has a unique ability to break down complex issues to ensure the key messages are understood. She has mentored many colleagues and students and provides an important representation for wildlife and disease ecology in human health through her role within the University of Melbourne.

As a leader in the field of avian influenza research and ecology, she is an honorary appointee on the <u>World</u> Health Organisation Collaborating Centre for Reference and Research on Influenza. Dr Wille is considered, consultative, collaborative and continues to go above and beyond to the benefit of Australia's environment and unique wildlife.

Dr Michelle Wille was nominated by Victoria Grillo from Wildlife Health Australia.











Southern NSW Drought Resilience Adoption and Innovation Hub

Hosted by Charles Sturt University

In 2022, the Southern NSW Drought Resilience Adoption and Innovation Hub (the Hub) started the <u>Managing Biosecurity Risks</u> project in a significant step toward engaging regional communities to strengthen biosecurity management systems and strategies in Australian agriculture. The Hub brought together key regional stakeholders to expand their understanding of, and participation in, biosecurity management. This included the New South Wales Department of Primary Industries and Regional Development, the New South Wales Wine Industry Association (NSW Wine) wine producers, technology provider Onside and community representatives. They used lessons learnt to explore broader applications across the state and beyond.





A key component of the project was the Track and Trace System, which enables faster and more effective tracking of possible biosecurity risk vectors to minimise or manage biosecurity threats. This system uses a digital check in/ check out app within the wine industry.

The Track and Trace System pilot was coupled with a regional biosecurity simulation (Exercise Sour Grapes) held in Orange in May 2023. It was designed to build awareness and increase involvement in biosecurity management among farmer, supply chain, community and response agencies. The simulation used data collected in vineyards over the life of the project to assess response efficiency and effectiveness and create information and tools to support future preparedness activities around biosecurity management. The response from participants in the Track and Trace project was positive. Participants reported increased awareness and knowledge of practices to manage on-farm biosecurity risks. The pilot demonstrated the potential of Track and Trace technology to address biosecurity needs and outbreaks.

The Hub undertook an extensive review process focused on the first phase of the biosecurity system (Prepare and Prevent) and developed a strategic framework for increased preparedness through targeted regional participation in extension and adoption activities nationally. The framework encourages participants to analyse gaps and identify outputs and activities most relevant to their region, community, and circumstances. Through its Biosecurity Preparedness in Southern NSW Investment Framework, the Hub also highlighted the need for regional communities to be more actively and transparently involved in biosecurity. The Hub engaged the Regional Australia Institute to develop a Regional Biosecurity Framework to empower regional communities to engage in biosecurity preparedness.

The framework sets out steps for communities to develop their own biosecurity action plan by:

- limiting biosecurity risks by embedding preparedness in day-to-day activities
- identifying biosecurity preparedness opportunities and resources available to the region
- engaging regional community members, businesses and organisations in biosecurity preparedness activities.

The Hub and its project partners have created a blueprint for engaging communities and regions in biosecurity management that can now be tested, modified and applied to other regions and industries across Australia.

Southern NSW Drought Resilience Adoption and Innovation Hub (hosted by Charles Sturt University) was nominated by Stuart Kearns from Plant Health Australia.







SEA LIFE Melbourne Aquarium and Agriculture Victoria

Together, <u>SEA LIFE Melbourne Aquarium and Agriculture</u> <u>Victoria</u> have made a significant contribution to reducing aquatic biosecurity risks through their <u>Junior Marine</u> <u>Biosecurity Officer program</u>. Launched in May 2024, the month-long initiative aimed to raise awareness about the importance of protecting marine ecosystems and preventing the spread of marine pests.

The program targeted school-aged children and provided visitors with an immersive and innovative educational experience. Through dedicated exhibits and activities, participants learned about the critical role of biosecurity in safeguarding marine biodiversity.

As part of the program, visitors were lead along a trail, keeping an eye and ear out for information about invasive marine pests along the way. They also learnt about ways in which invasive marine species can be introduced into Victoria and how they can impact native ecosystems. The program sought to educate audiences on high-risk invasive species and how to report them, to ensure we all help protect Australia's marine environments. Once they completed an activity book, participants received a Junior Marine Biosecurity Officer certificate.





Marine pests can cause significant harm to Australia's marine environment. These pests can include a wide range of organisms, from microscopic algae to various species of sea stars, sea squirts, mussels and crabs.

Enhancing environmental biosecurity efforts helps to conserve, restore and care for Australia's sea and aquatic ecosystems, protect native species and support biodiversity. Agriculture Victoria, as the state's lead agency for marine biosecurity, works to promote marine biosecurity issues through engaging with other jurisdictions, industry and the community. Through these initiatives, Agriculture Victoria aims to minimise the risks of new incursions and to maximise protection from biosecurity risks. SEA LIFE is the world's largest family of aquariums. Conservation of marine life is at the heart of the SEA LIFE Conservation, Welfare and Engagement (CWE) team's work. Their goal is to inspire guests to fall in love with Australia's oceans and protect marine life. To do this, SEA LIFE experts look at new ways in which creatures, display techniques and technology can create the most engaging and enlightening experiences. They also promote conservation and welfare work.

The collaboration between SEA LIFE Melbourne Aquarium and Agriculture Victoria is the first of its kind to be championed in Australia. Building on the expertise within both organisations for marine biosecurity risk and education, the program has raised the awareness of marine biosecurity issues and fostered a sense of shared responsibility with thousands of school-aged children and the public more broadly.

Thousands of participants have followed the marine biosecurity trail at the aquarium with more than 5,000 <u>Marine Pest Activity Books</u> handed out to the next generation of marine biosecurity heroes.

Following the programs' huge success, SEA LIFE's parent company, Merlin Entertainment, is developing a similar program for its Mooloolaba and Sydney sites in collaboration with the Queensland Department of Primary Industries and New South Wales Department of Primary Industries.

SEA LIFE Melbourne Aquarium and Agriculture Victoria were nominated by Luke Barron from Aquatic Biosecurity, New South Wales Department of Primary Industries.





BIOSECURITY COMMENDATION CERTIFICATES

These certificates recognise those who have contributed to supporting and promoting Australia's biosecurity on a local or regional scale.



2024 RECIPIENTS



Inverbrackie Border Leicester Stud

For exceptional dedication to on-farm biosecurity and advocating biosecurity among their networks.



Alinytjara Wilurara Landscape Board

For exceptional contribution to managing biosecurity threats, especially invasive buffel grass, in and beyond the Alinytjara Wilurara region of South Australia.



Centre for Invasive Species Solutions

For outstanding leadership in national environmental biosecurity research and development, innovation and education.

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Kayvan Etebari and the University of Queensland Animal and Plant Biosecurity Team

For their role in educating the next generation of biosecurity professionals, providing comprehensive training in biosecurity principles, regulations, surveillance, diagnostics and management strategies.

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Dr Mike Hodda Insect and Nematode Biosecurity, National Research Collections Australia, CSIRO

For exceptional contribution to improving the infrastructure and capability of Australia's biosecurity system.



Dr Jo Luck

For outstanding scientific contribution, leadership and collaborative approach to plant biosecurity.



Ryan Nicholson

For playing a role in protecting Australia's economy and environment by identifying and reporting a potentially significant biosecurity risk.



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