



Department of
Primary Industries and
Regional Development

Protect
Grow
Innovate

European Wasp Plan

2026 – 2031



Cover photograph

European wasp (*Vespula germanica*)

Version September 2026



European wasps forage on human food

Important Disclaimer

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European wasp entry to an underground nest

Introduction

The European wasp (*Vespula germanica*) has become a significant pest globally, impacting horticultural and viticultural industries, outdoor lifestyles and the environment in areas where uncontrolled.

The Department of Primary Industry and Regional Development (DPIRD) has successfully prevented the European wasp from establishing a permanent population in Western Australia (WA) since 1977.

Each year, fertilised wasp queens arrive in WA via freight and cargo mostly from the eastern states where the wasps are well established. Consequently, the risk of future incursions in WA remains ongoing. Early detection and efficient eradication of these incipient incursions is the key to maintaining WA free from the pest.

Currently, a significant incursion is anticipated for the 2026-27 season in the southwest of WA, around Albany due to wasp nests being unable to be located at the end of the 2025- 26 season. If this incursion is not managed the pest could become widespread.

This plan outlines the activities to be undertaken by DPIRD from 2026 to 2031 to continue to control incursions and maintain WA's European wasp free status.

DPIRD recognises that the community play a key role in assisting with the early detection of the European wasp incursions.

Aim

Prevent the European wasp from establishing in WA.

Governance

DPIRD is responsible for protecting WA from biosecurity threats under the *Biosecurity and Agriculture Management Act 2007* (BAM Act) and associated regulations. The European wasp team within the Invertebrate Pests section leads the implementation and reporting on this plan. The plan will be reviewed in 2031.

Important links

- DPIRD website: [European wasps: declared pests in WA](#)
- [Vespula germanica : European Wasp | Atlas of Living Australia](#)
- [Vespula vulgaris : Common Wasp | Atlas of Living Australia](#)
- [Wasp identification guide](#)

Report sightings via:

- An online report at mypestguide.dpird.wa.gov.au or
- Use the MyPestGuide reporter app, or Phone: (08) 9368 3080, or
- Email the Pest and Disease Information Service (PaDIS): padis@dpird.wa.gov.au

Adopt a trap – DPIRD run a program which invites community members, businesses and local governments to adopt a trap to monitor for European wasps during the active wasp season, December to May. [Get involved](#).

To be part of the 'Adopt-a-trap' program, [sign up online](#) at dpird.wa.gov.au or call PaDIS on (08) 9368 3080 or email padis@dpird.wa.gov.au.

Context

The problem

The European wasp, or German wasp, prefers a temperate or mediterranean climate.

The wasp is about 12-16 mm long, with distinctive yellow and black stripes, a characteristic similar to several other wasps, bees and flies, and so is often mistaken, especially for the more common European paper wasp (Figure 1).

The European wasp has distinct black antennae and flies with raised legs unlike all other wasps and bees that dangle their legs in flight. They feed on meat, fruit, drinks, pet food, insects, and dead animals. Most European wasp nests are built underground but can also be found in places such as tree hollows and cavities in walls, or ceilings of building (Figure 2). They have the ability to sting repeatedly.

European wasp colonies naturally die off in winter in their native range, but in locations with milder winters, such as in parts of Australia, nest construction can continue throughout the year with multiple queens sharing the same nest, producing thousands of individuals in the next season¹.

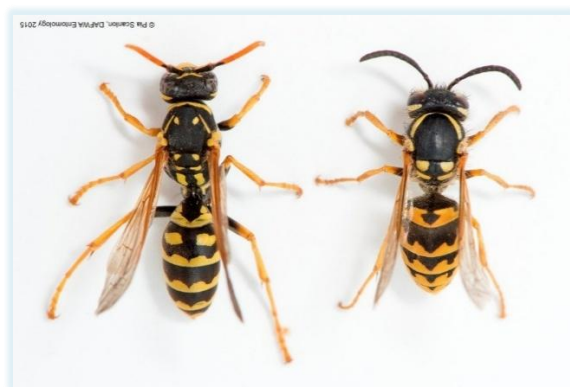


Figure 1 – Comparison between the European paper wasp (left) and the European wasp (right)



Figure 2 – A typical European wasp nest entrance (left) and an exposed, treated, nest underground (right)

¹ Cacho, O., Hester, S. and Tait, P. (2021). Re-evaluating management of established pests including the European wasp, *Vespula germanica* using biocontrol agents. Centre of Excellence for Biosecurity Risk Analysis, Melbourne.

The European wasp's invasive characteristics include:

- adaptability – enabling them to survive in a range of different environments;
- a lack of predators;
- ability to overwinter – i.e. colonies survive over winter and become multi-queened the next season and disperse;
- a highly aggressive nature, far more aggressive than other wasps or bees;
- reproducing quickly and building large nests that can house thousands of wasps;
- attracted to human activities more than other wasps, as they are attracted to both protein (e.g., meat products) and sugar.

Impact on agriculture:

- In WA in 2019, it was estimated that unmanaged European wasps would cost an estimated \$1.1m per year in damages to apiculture. European wasps predate on honeybees and rob hives, significantly impacting the apicultural industry directly while also reducing pollination services, leading to reduced crop yields in both horticulture and broad acre crops.
 - In New Zealand in 2015, it was estimated that the losses to beekeeping from the direct effect of European wasps on hives was \$8.8m per year².
- Predate on chicks in chicken hatcheries.
- Damage horticulture and viticulture crops, such as grapes and stone fruit.
 - In southeastern Australia in 2021, wine grapes and strawberries have reportedly been damaged by European wasps, with estimated yield losses of 10-25%³.
- Pose a stinging hazard to livestock, fruit pickers and field workers.

Impacts on human health, recreation and tourism:

- Wasp nests are often built underground and hidden. Disturbing a nest can lead to multiple painful wasp stings, which in extreme cases can cause allergic reactions and anaphylaxis.
- Disrupt outdoor work activities such as maintenance, field and orchard work.
 - In New Zealand, forestry field officers need to be trained in diagnosing and treating anaphylaxis at a cost of \$15,000 per year (2015⁴).
- Disrupt recreational activities, such as gardening, bushwalking, picnicking, barbeques, schoolyards, outdoor dining areas and open markets, and can sneak inside open drink cans, which can then pose a danger if swallowed.
- Pose a risk to pets as the wasps are attracted to food in pet bowls.

Ecological impacts:

- Compete for honeydew and sugar resources with nectar-feeding birds and insects.
- Compete with and predate on native insects (including pollinating insects), reducing biodiversity, and ecosystem function.
- Monopolise carcass decomposition sites, excluding other scavengers, reducing biodiversity and disrupting the natural cycle of decomposition.

² Cacho, O., Hester, S. and Tait, P. (2021). Re-evaluating management of established pests including the European wasp, *Vespula germanica* using biocontrol agents. Centre of Excellence for Biosecurity Risk Analysis, Melbourne.

³ Cook DC. 2019. Quantifying the potential impact of the European wasp (*Vespula germanica*) on ecosystem services in Western Australia. NeoBiota, 20.

⁴ MacIntyre, P.; Hellstrom, J. 2015: An evaluation of the costs of pest wasps (*Vespula* species) in New Zealand. Department of Conservation and Ministry for Primary Industries, Wellington. 44 p.

Impacts of European wasps

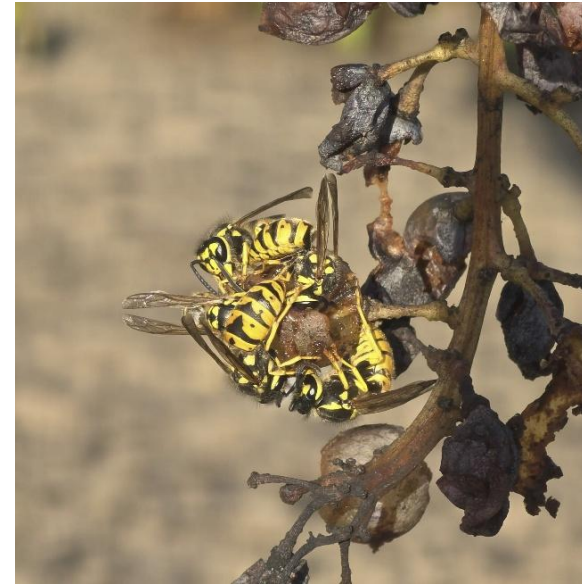
"In the 1990's you couldn't eat a meal outside, but efforts by the local councils seem to have worked and it's much better now" (personal communication, South Australia)



Woman stung 20 times while working on Yarra valley property*



Nest found in wall of home



Wasps feeding on grapes, South Africa

"In Israel, they were found to damage the udders and teats of dairy cows" ([Modelling the potential spread of the E.wasp](#)).

Café closes for 3 days – Daylesford Victoria

"We had to close because there were literally thousands of them coming into the café." **



Wasps attracted to drink can **



Wasp in dog's food bowl, UK ***



Wasps attracted to meat, feeding on café patrons' meals**

* 2025, [Aussie mum's brutal injuries as property owners warned of painful threat hidden underground](#) - Yahoo News Australia

** 2025, [European wasps swarm Victoria as warm weather leads to population boom](#) - ABC News

*** 2022, [Vets issue warning to pet owners over bee and wasp stings as cases soar](#) - Dogs Today Magazine

Legal status

The European wasp is a declared pest in WA under section 12 of the BAM Act. It is assigned to control category C1 – exclusion/prohibited – for the whole of WA.

Everyone has a responsibility to report the suspected presence of the pest under s26 of the BAM Act, and owners and occupiers of land are subject to the control requirements for a declared pest established under section 30 of the BAM Act.

Section 42 of the BAM Act allows DPIRD officers (including inspectors) to carry out operational work for the control of a declared pest.

While landowners and occupiers have legal obligations under the BAM Act in relation to declared pests, DPIRD currently leads the surveillance, response and eradication program for European wasps in WA. This reflects the highly mobile nature of the pest, which can forage across multiple properties and land tenures, as well as the specialist knowledge, equipment and training required to locate and destroy nests safely and effectively.

The success of the program, in part, relies on the reporting of suspected European wasp activity by members of the public and landholders, and the coordinated rapid response undertaken by DPIRD.

Distribution

The European wasp is native to Europe, Northern Africa and temperate Asia, but has spread to North and South America, South Africa, New Zealand and southeastern Australia (Figure 3).

The first European wasp detection occurred in Sydney in 1954, when hibernating queens were discovered on timber imported from New Zealand. The first wasp nest was found in Tasmania in 1959, but nests were not found on the mainland until the 1970s. European wasps are now well established in Tasmania, Victoria, South Australia, New South Wales and the Australian Capital Territory. In these states early eradication programmes were abandoned as the pest became more widespread.



Figure 3 – Recorded detection localities of the European wasp in Australia

The projected climate suitable areas for the European wasps are shown in Figure 4, aligning with the most populated and prime agriculture regions of the country.

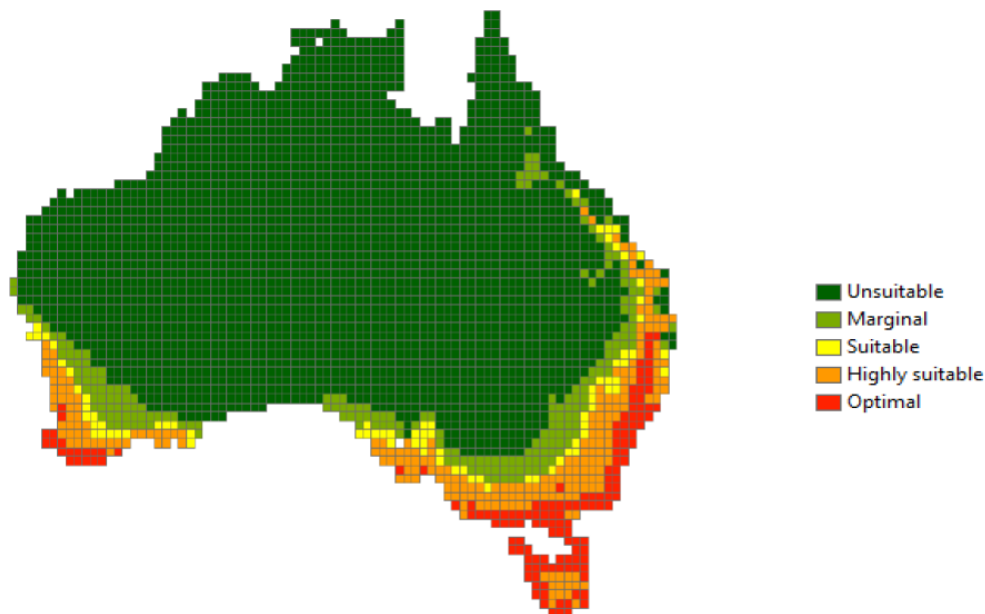


Figure 4 – Projected climate suitability for European wasps in Australia based on CLIMEX simulations ⁵

Distribution in WA

The first recorded European wasp nest detection in WA was in 1977 at Mosman Park.

Detections have since occurred across the metropolitan area, mostly around key risk pathways from the eastern states, such as transport hubs, freight depots and industrial areas. Consequently, traditional 'hot spots' in the metropolitan area include the industrial areas of Welshpool, Kewdale, Canning Vale, Bibra Lake, Atwell, Munster, Malaga, Roleystone and Wangara.

Nests have also been found in the regional areas of Albany, Australind, Bunbury, Busselton, Capel, Donnybrook, Eucla, Geraldton, Hyden, Kalbarri, and Kalgoorlie (Figure 5), again mostly linked to freight, machinery and/or equipment arrivals from interstate.

Wasps queens travel well hidden!

- 1 wasp queen found in box of red stilettos from Italy.
- 4 queens found in broccoli from Tasmania.
- Wasp queens found in a box of organic celery imported from South Australia.

⁵ Cacho, O., Hester, S. and Tait, P. (2021). Re-evaluating management of established pests including the European wasp, *Vespula germanica* using biocontrol agents. Centre of Excellence for Biosecurity Risk Analysis, Melbourne.



Figure 5 – European wasp nest detections across WA 1977- 2026

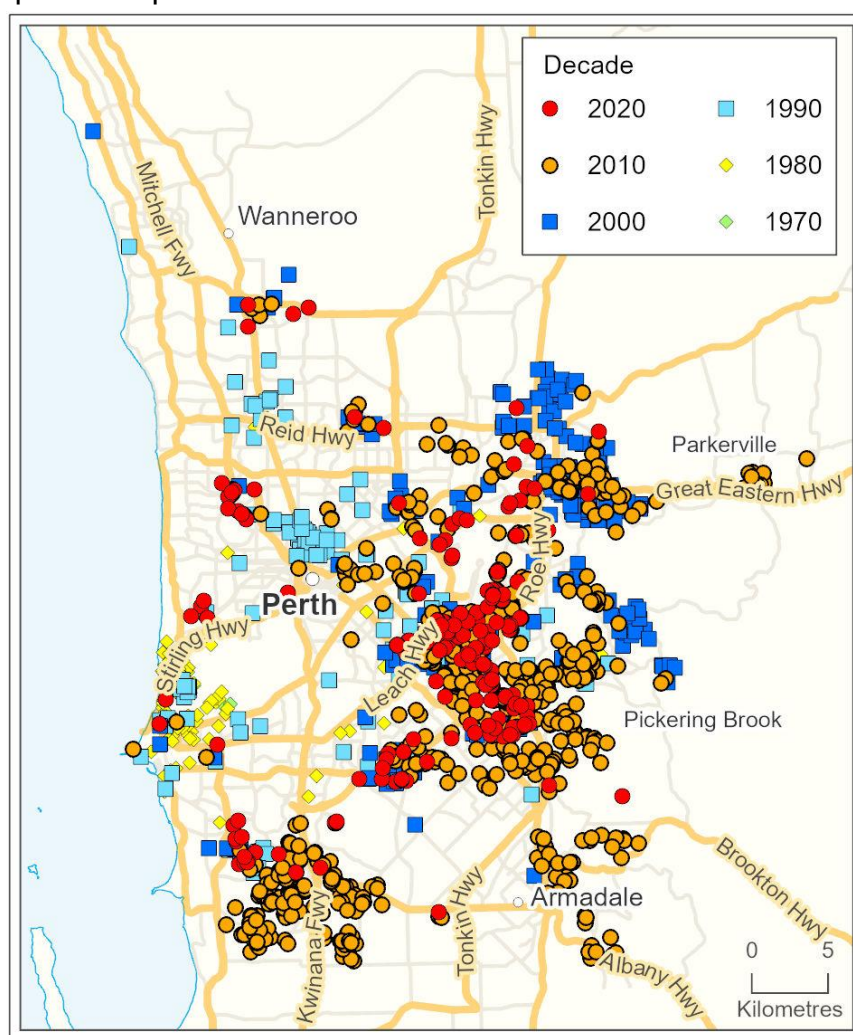


Figure 6 – European wasp nest detections across metropolitan Perth 1977- 2026

Cost benefit of early intervention

The current cost, and benefit, to WA of managing the European wasp requires updating.

Control in the states where the pest is well established often relies on the public to engage private pest controllers, sometimes supported by a local government program. WA is the only state actively preventing the European wasp from permanently establishing.

A 2019 analysis estimated that the combined net benefit to WA, after management costs, was between \$3.2-6.3 million per year, with the largest beneficiaries being the producers of crops dependent on insect pollination and households/recreational activities. Limited studies on biodiversity and environmental impacts exist and if these impacts were considered, the benefits would be much higher.

Feasibility of eradication

Currently, WA does not incur costs associated with destroying nests in homes, losses of soft fruit/grapes, loss of honey and bee larvae in apiaries, wasps contaminating human food in shops and bakeries, and wasps impacting the tourism industry and human amenity generally.

Even though wasp incursions are inevitable, WA is in a unique situation, due to its isolation from the infested regions and limited entry points, that an eradication program reliant on surveillance and control remains a feasible option, allowing WA to remain free from established populations of this pest.

Program cost

The cost of the current program is approximately \$500,000 per year for routine surveillance and control activities over the 9-month wasp season. The key costs include:

- 2 permanently employed DPIRD officers – a Program Coordinator and Technical Officer for program planning and technical advice and treatment activities;
- 5 contract field officers for surveillance activities;
- vehicle hire;
- accommodation; and
- fish and trapping supplies.

During an incident these costs increase, as evident in the recent 2024-25 incident in the regional centre of Albany, in which a further \$200,000 (approximately) was required to employ 2 more field officers, hire 2 extra vehicles, and purchase more traps and fish for the increased surveillance and control program.

Surveillance and control methods

There is a time-critical window from December to May in which European wasps can be reliably trap-detected, and their nests located and destroyed.

If nests are not found and destroyed before the end of autumn, over 1000 new queens can develop, hibernate (overwinter) and can seed new nests in spring. European wasp nest numbers have the potential to exponentially increase if not controlled.

Early detection is critical to effective European wasp control with trapping and surveillance key to the program.

Typically, the wasp season runs from November to May.

Surveillance methods

Method 1 – used in the regular ‘hot spot’ areas

Some 2500-3000 traps are deployed in the ‘hot spots’ and areas in between, to ensure the metropolitan area from Wanneroo in the north to Wandi in the south and Mundaring in the east is covered by surveillance efforts.

Each trap bottle contains a fish lure and has holes in which the wasp can crawl into but not so readily escape from (Figure 8). Young wasps have a high protein drive, which is required to continue the expansion of their nest, thus increasing the likelihood of wasps being lured to the fish in the traps, which are checked fortnightly. The heat of summer dries the lure quickly preventing it becoming attractive to flies and blowflies, keeping the trap free of non-target species and attractive only to the wasps.



Figure 8 – European wasp trap with fish lure inside

Once a wasp is found in a trap, wooden stakes are set up approximately 150m from the trap in 4 directions, with a piece of fish placed on top of the stake as a lure (Figure 9). Visual observation is then used to track the wasps flying back to the nest site/s.

Wasps generally forage up to 500m from the nest, but this can increase to a kilometre or more, depending on the availability of food and water. Detection of wasp nests by tracking is feasible within these relatively limited foraging ranges. The trapping window closes as the foraging priority for the wasps switches to sugary foods late in the season, around mid-April. At this point, wasps cannot be tracked back to nests, and detection relies on observation of the nest entrance itself, a difficult process when nest entries are often hidden.



Figure 9 – Fish lure on top of stake.

Method 2 – used at new detection sites

Positive wasp detections outside the existing trapping network are responded to using the stake and fish bait process, as it is highly likely a wasp nest is nearby.

However, if it is an unconfirmed report of a European wasp, 5 -10 traps would be placed around the area of the report to confirm the presence of European wasps, and then the stake and fish bait process would be deployed. Once the nest is located and killed in the new area, a trapping grid out on a 1-1.5km radius (depending on the terrain and region) would be set up from the nest to ensure there are no more nests in the area.

Treatment methods

It is not recommended for members of the public to destroy European wasp nests.

Toxic dust method

Discovered nests are manually destroyed by dusting with a household insecticide. The active ingredient generally used to destroy European wasp nests is a 1% Permethrin dust (e.g. Coopex® Dust 10g/kg permethrin). This dust is directed into the nest using a modified garden blower (Figure 10). The insecticides used break down readily, are of low toxicity to animals, except fish and other invertebrates, and are typically applied underground directly into the nest.

Figure 10 – Underground nest being destroyed



Toxic baiting method

When nests cannot be found, at the end of the season or where there is difficult terrain, poisoned fish baits in cylindrical bait stations are deployed (Figure 11). The toxicant added to the bait is in a dosage that is sufficiently slow acting, to allow the foraging wasps to return to the nest and feed the bait to the queens and brood.



Figure 11 – Bait station (left) and wasp eating bait in station (right)

Movement controls

There are currently no interstate transport controls for European wasps as this would logistically be very difficult to monitor due to the sheer volume of transported goods.

Incident responses and decision triggers

An incident response will require approval from the Deputy Director General, DPIRD and includes increased surveillance, resourcing and control activities.

An incident response will be triggered when any of the following conditions are met:

- the area is large
- the terrain is difficult to navigate, and nests are difficult to detect due to being in remote bushland or tree plantation areas
- there is evidence of multiple undetected nests (i.e. considerable wasp activity being detected at lures, but no nests being found) and the end of the wasp season is closing in when new queens will be produced and released for the following season
- there is evidence of an overwintered nest plus multiple detections in a location.

At this point, surveillance requirements and control activities exceed available resources, and additional personnel are needed to locate nests, and/or the area requires baiting promptly and thoroughly to destroy nests and prevent queen production.

An incident will be closed when:

- there are no new wasp detections in either the surveillance traps or on the lures across the delineated treatment area at the end of the season (end of June)
- baiting is completed in the designated area, with no more detections.

Surveillance will resume the following season in the response areas, plus a predetermined buffer zone, to check for wasp activity from new or overwintered nests.

Albany outbreak

February 2024 – European wasps detected by a local contractor working on a roof in Napier, 25km north of Albany. Forty surveillance traps were deployed and 12 nests detected and destroyed, but there was evidence of more nests. This was the first time in 20 years European wasps have been detected in the Albany region.

An incident response was declared in May 2024 to support the increase in surveillance and control activities required to find all the nests before the end of the wasp season. Five hundred and fourteen bait stations and 250 traps were deployed over 6 weeks, resulting in 30 nests found and destroyed around the Napier site, and 1 nest located and destroyed in McKail, a suburb of Albany.

October 2024 – at the start of the 2024-25 wasp season 449 traps were deployed with only 1 nest being found for the season, suggesting a successful eradication program the previous season.

However, in the 2025-26 season 2 overwintered nests were discovered, 1 in the Albany town centre and the other 1.5km outside of the Napier baiting perimeter of 2023-24 season. Thirty eight new nests were then discovered and destroyed in 4 distinct pockets: Albany (Mt Clarence), Napier (Yungup Rd – original outbreak site), Napier (Harris Road) and Napier (Settlement Road), along with a late season detection on the southern border of the Porongurup National Park, 1km east of Napier Hall, Sherwood Cottage in King River and in Upper Kalgan.

Albany will require focussed effort in 2026-27 summer to prevent establishment of European Wasp in this regional location.

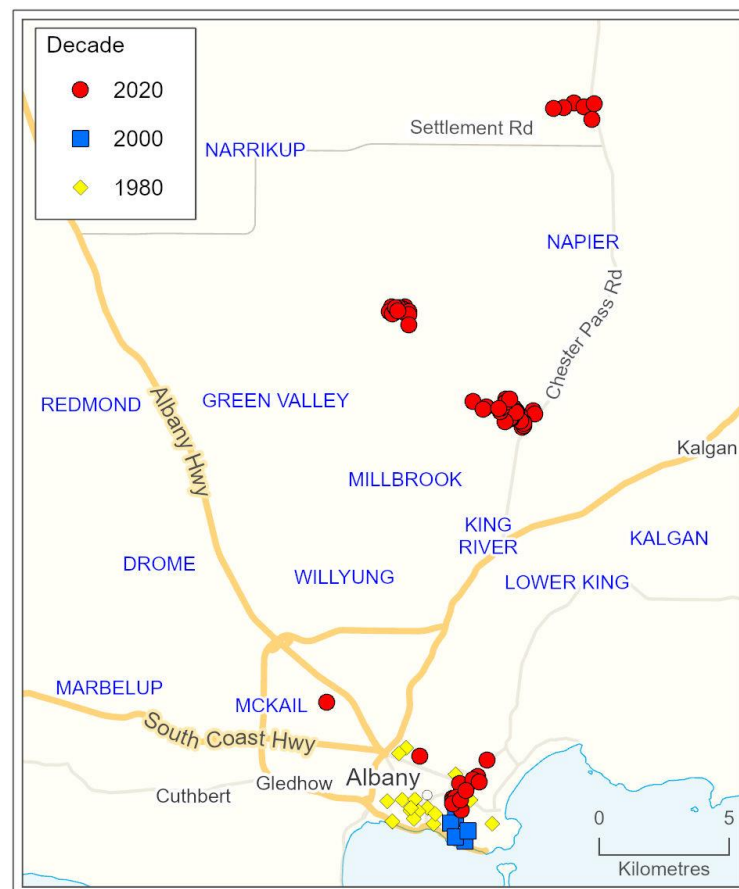


Figure 11 – European wasp detections in the Albany region by decades 1980 - 2026

Actions

Action	Task
Increase community awareness	Conduct targeted community awareness campaigns at the start and end of the European wasp season, using a variety of platforms such as media statements, emails, infographics, social media, DPIRD website and rural publications.
Review	Undertake a cost benefit analysis to support the continuation of the program in WA.
Plan	Determine surveillance areas for upcoming season, based on previous seasons outcomes and known 'hot spots' with surrounding buffers. Include activities for Perth metropolitan area, Bunbury, Geraldton and Albany.
Detect	Publicise the 'Adopt a Trap' program through various media platforms, at the commencement of the wasp season to encourage community participation in detecting wasps in locations that are perhaps not covered by DPIRD surveillance.
	Deploy the wasp traps with fish lures across the metropolitan and key regional areas during November, in accordance with identified surveillance areas.
	Inspect wasp traps fortnightly.
	Follow up on landholder and public reports (through PaDIS and MyPestGuide) of possible sightings of European wasps.
	Confirm identification of any wasp reports that they are European wasps.
	Track wasps to nests using stakes and fish lure method.
Delineate	In new areas where wasps are detected, establish a grid of traps around the detection site to delineate the extent of the infestation.
Declare an incident response	Increase surveillance and control activities when triggers for an incident response are met, currently required in Albany for the 2026-27 and 2027-28 wasp seasons.
Review declaration status	The Albany response could trigger a review of the declaration status and this plan.
Control	Destroy nests as found, with either toxic dust or poison baits.
Improve control and detection technology	Explore alternative options for detecting and tracking wasps and detecting nests.
	Explore alternative options for control.
Collect and analyse wasp DNA	Collect subsamples of European wasps during each seasonal program and undertake genetic analysis of wasps from new incursions to determine relatedness and lineage of incursion to assist in identifying pathways.
Capture data	Ensure all appropriate surveillance, control, effort and outcome data is captured electronically for informing adaptive management decision, e.g. currently using DPIRD's 'Trap Base' application for surveillance and control activities and MyPestGuide application for all nest locations.
Analyse data	Undertake data analysis and modelling to determine success of annual program.
Report	Provide an annual report on the European wasp program for the season.
Confirm area freedom for localised incursions	For new, localised incursions, continue surveillance regime for 2 years after initial incursion, and if no further wasps found declare area freedom for that area, with only periodic or limited monitoring required.