



Department of
Primary Industries and
Regional Development

Protect
Grow
Innovate

European Starling Plan

2026 – 2031



Cover photograph

European starling (*Sturnus vulgaris*)

Version 1

June 2026



Photo - Starlings on the back of sheep (image credit Tina Bentz).

Important Disclaimer

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Table of Contents

Introduction4

Aim.....4

Governance4

Important links4

Context5

The problem.....5

Legal status7

Distribution.....7

Surveillance and control methods9

Actions.....12



A murmuration of European starlings, USA

([This Invasive Creature Was Brought To The U.S. Because Of Shakespeare. And The Consequences Are Dire](#))

Introduction

The European starling (*Sturnus vulgaris*) is a significant biosecurity threat to Western Australia (WA), with the potential to cause major agricultural, environmental and social impacts if they establish.

The Department of Primary Industry and Regional Development (DPIRD) has successfully prevented starlings from establishing in WA. Although starlings have been recorded as early as 1917, it was not until the 1970s – when increasing numbers of birds began arriving – that an annual, targeted control program was introduced.

While starling populations remain uncontrolled in other Australian states and overseas the birds will continue to arrive each year and the risk of an incursion in WA remains. Without continued vigilance, there is a risk that a breeding population could establish, requiring a significantly larger and sustained eradication response.

This plan outlines the activities to be undertaken by DPIRD from 2026 to 2031 to maintain WA's status as free of established starling populations.

DPIRD recognises the importance of the support from landholders and communities across the impacted regions and will continue to work collaboratively to minimise the risk of starlings establishing in WA.

Aim

Prevent the establishment of a self-sustaining European starling population in WA.

Governance

Landholders are responsible for managing pests on their land, while DPIRD is responsible for protecting WA's agricultural resources from biosecurity threats under the *Biosecurity and Agriculture Management Act 2007* (BAM Act) and associated regulations.

The Invasive Species Operations section leads the implementation and reporting on this plan. The Invasive Species Planning section will evaluate this plan in 2031.

Important links

- DPIRD website: [Common starling: biosecurity alert](#)
- Starlings in the USA: [European-Starlings-WDM-Technical-Series](#) and [When Does the European Starling Become a Problem- The Invasive Bird Crisis Explained](#)

Report sightings via:

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

Context

The problem

The European starling prefers cool or temperate climates and is commonly associated with agricultural landscapes and urban environments.

The species' invasive characteristics include:

- ability to breed prolifically, capable of having multiple clutches each year. Whilst survival rate varies, once established, their high reproductive capacity can result in rapid population growth, leading to large, unmanageable populations.
- omnivorous diet enabling survival across diverse habitats.
- flocking behaviour, forming large, mobile groups that rapidly colonise new areas.
- aggressive behaviour, out-competing native birds and marsupials for food and nesting hollows.
- cryptic behaviour that makes the bird difficult to detect and consequently control.

Agricultural impacts:

Starlings pose a significant threat to primary industries by:

- damaging fruit and grain crops through feeding
- contaminating livestock feed, water sources and wool with their droppings
- reducing product quality and increasing management costs
- having the potential to spread livestock diseases.

Environmental impacts:

They affect native ecosystems by:

- competing with native fauna, both birds and marsupials, for resources;
- displacing native species and reducing biodiversity;
- altering ecosystems by affecting native plant and insect populations.

Social impacts:

In urban areas large starling flocks create significant nuisance and economic costs through:

- fouling and damaging infrastructure, buildings and public spaces, with their corrosive droppings
- constant and high level of noise and odour from large roosting flocks.

Globally, they are recognised as one of the world's 100 worst invasive species. Should starlings become established in WA, it is estimated their numbers could grow to 12.5 million within 30 years with an estimated cost of \$230M/year to agricultural production alone.

Leaving them uncontrolled can quickly lead to the establishment of a viable breeding population, requiring increased effort over several years to control, as evident by the incursion in the mid-2000s (Figure 1).

Impact of starlings

Hordes of common starlings are causing havoc in the town, defecating on footpaths, shop fronts, sheds, and water tanks.” (Business owner, Streaky Bay, South Australia)

“It is just not a nice place to be because it smells and if you are a visitor trying to have a tourism experience here, a starling experience is not one that we want them to remember.” (Deputy Mayor, Streaky Bay, South Australia)*



A flock of starlings in the path of a landing jet USA



Cherries pecked by starlings USA



Starlings resting and feeding at a dairy farm USA



Vehicle parked near an urban starling roost USA



Starlings take over tree hollows from native species

* [European-Starlings-WDM-Technical-Series USA.pdf](#)

** [Smelly starlings causing havoc in seaside community for farmers, locals and tourists - ABC News](#)

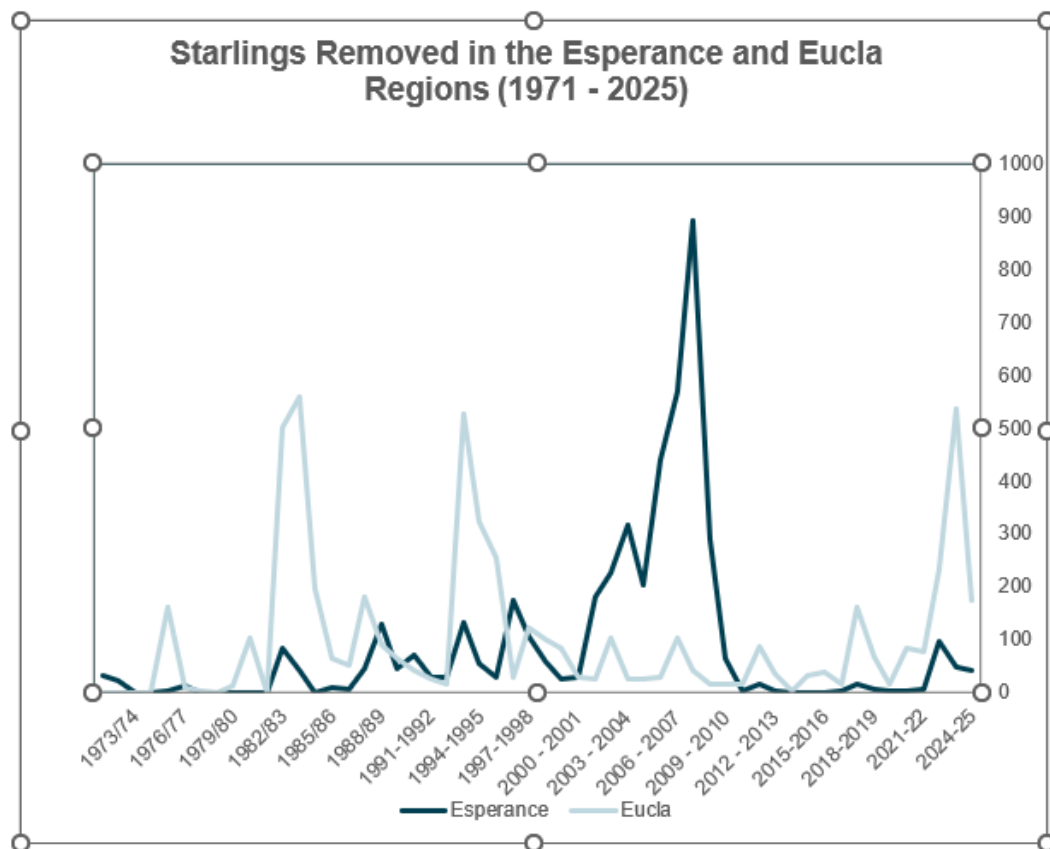


Figure 1 – Number of starlings removed from the Esperance and Eucla regions 1971 – 2025 showing how consistently they arrive in WA and how quickly numbers increase if controls are insufficient, as evident in the incursion in the mid-2000s.

Legal status

The European starling is a declared pest in WA and is prohibited under section 12 of the BAM Act. It is assigned to control category C2 (eradication) in the Shires of Esperance and Ravensthorpe, and control category C1 (exclusion) across the remainder of WA; however, the objective is to prevent the establishment of wild populations in WA, regardless of the category assigned.

The keeping of starlings is prohibited.

Distribution

Native to Europe, Asia, and North Africa, the starling has successfully established widespread populations on every continent, except Antarctica (Figure 2).

In Australia, starlings were first introduced to Victoria in 1863. Subsequent introductions and natural spread resulted in the species becoming well established in Victoria, New South Wales (NSW), Queensland, Tasmania and South Australia (SA). As a consequence of starlings becoming a significant pest in these states, they were placed on the list of prohibited imports to WA in 1895.

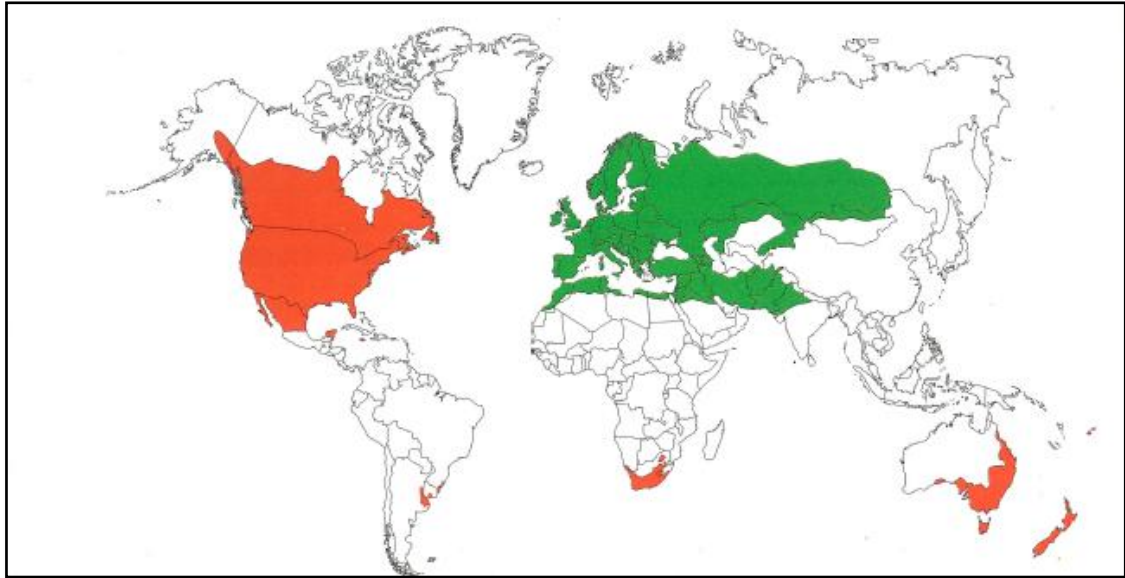


Figure 2 – Worldwide distribution of the European starling showing the natural (green) and invaded (red) ranges (Hart et al, 2020 Invasive Birds: global trends and impacts).

Distribution in WA

There is no known starling population established in WA.

The first recorded sighting of a starling in WA was a nesting pair in Albany in 1917, with another bird removed from Gingin in 1936. No further records were made until 1970, when a single starling was detected and removed north of Esperance. In October 1971, 26 starlings were removed from the Condingup area, east of Esperance – marking the first serious threat of a founding population in WA.

Genetic analysis, commencing in 2004, identified that most of the starlings detected in WA originated from populations in the eastern states. However, this is not always the case, the geographic source of a starling incursion removed from the Esperance region in the mid-2000s remains unknown.

As a migratory species, with the ability to fly long distances, the birds will continue to seek new territories from their current established locations.

Should the birds be allowed to establish, the area deemed suitable as their preferred habitat in WA is considerable, covering the southwest corner of the state from Geraldton to east of Esperance.

Surveillance and control methods

Surveillance

Early detection, rapid response, and sustained surveillance are critical to effective starling control.

Annual surveillance efforts are focused on 2 key areas along the south coast where starling activity has historically been concentrated: the Eucla and Esperance regions (Figure 3). Starlings have also been detected intermittently in other areas over the years, such as Bremer Bay and Many Peaks; these areas are also monitored.

Eucla region – entry corridor

The area of the south coast from the SA/WA border west to Caiguna is considered the highest priority surveillance area. This geographically restricted landscape between the Southern Ocean and the Nullarbor Plain, appears to function as a movement corridor for starlings entering WA from SA. The Nullarbor Plain appears to offer a natural barrier due to the largely inhospitable environment for the birds, with limited water and food availability. This provides a strategic opportunity to detect and intercept birds moving west. Surveillance activities operate for most of the year in the Eucla region.

Esperance region – establishment risk

The area west of the Nullarbor Plain along the south coast from Cape Arid to Hopetoun and Bremer Bay comprises largely cleared, agricultural land. This area provides abundant food and nesting resources and is considered highly suitable habitat for starlings. Surveillance operates across the Esperance region during the breeding season (spring and summer), when the risk of establishment is greatest.

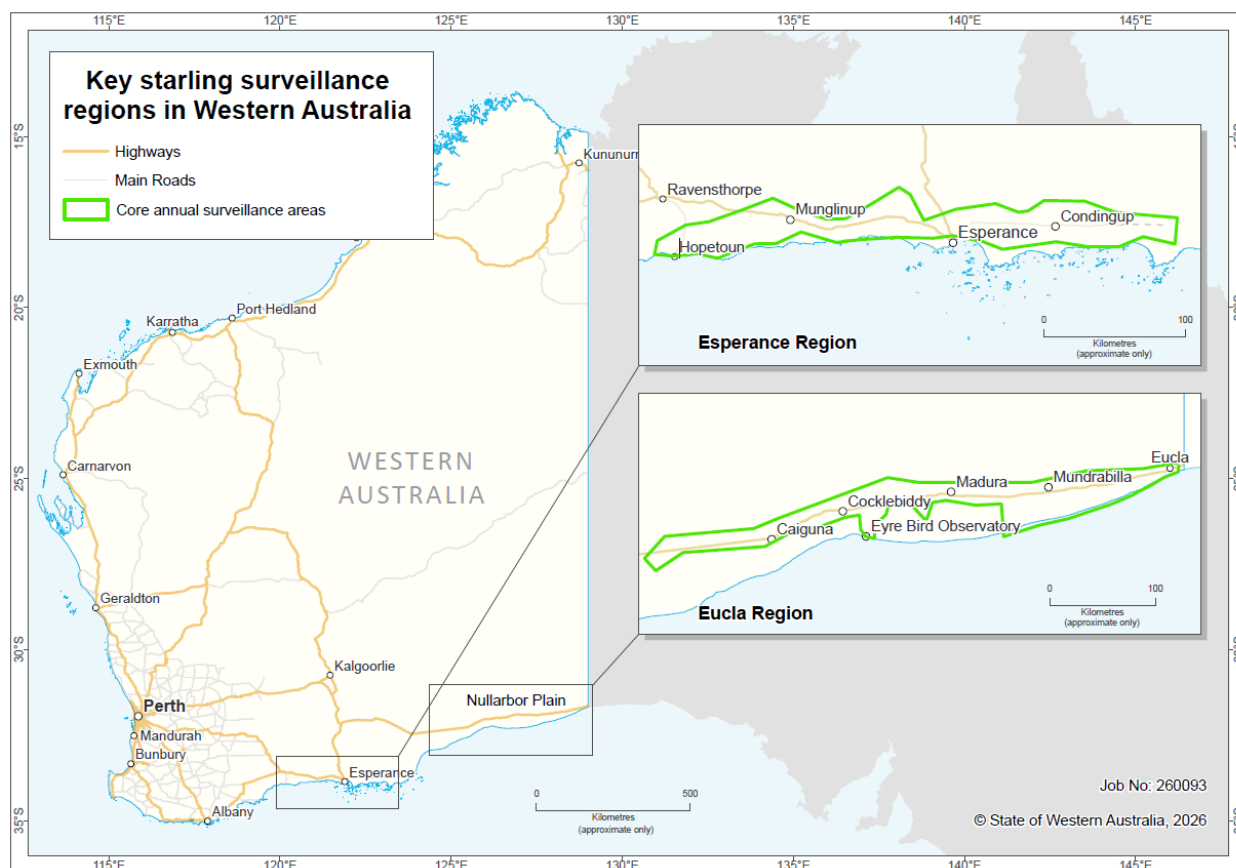


Figure 3 – Core starling surveillance areas in WA – Esperance and Eucla regions

Detecting and controlling invading starlings is particularly challenging at the early stages of invasion when bird numbers are extremely low, exacerbated by the vast and sparsely populated landscape of the south coast of WA. Therefore, a range of complementary surveillance methods are used to increase detection capabilities:

Trapping:

The use of traps with live lure birds is the primary detection and capture method (Figure 4). Traps are strategically located near swamps, water sources, sheep and cattle properties, as these environments provide preferred foraging and breeding habitat.



Figure 4 – Starling live lure trap – incorporating an internal cage housing 2-3 lure starlings, and the larger outside trap cage with a ‘V-top’ design to facilitate entrance and capture of free ranging starlings.

Visual surveillance:

Looking for birds with the naked eye or through binoculars is a technique used to locate birds that cannot be trapped. Starlings are one of a few birds that has a unique behaviour of perching on a sheep’s back.

Tracking:

The use of GPS trackers attached to wild-caught birds are used to locate birds that do not enter traps and to better understand their movement patterns.

Automated acoustic detection:

Recording units (song meters) on acoustic towers are deployed in locations where trapping is impractical or outside core surveillance areas. These devices operate year-round to detect starling vocalisations or confirm the absence of the birds if no starling song is detected.

Control methods

Captured birds are removed and used as live lure birds or euthanised. For birds that do not enter traps, alternate control options, typically shooting, is undertaken.

All surveillance and control activities are conducted in accordance with relevant legislation, including the *Animal Welfare Act 2002* and the *Firearms Act 2024*.

Genetic analysis

DNA is collected routinely from all birds as they are captured. Genetic analysis has revealed information on:

- the likely geographic source location of WA starlings which helps to inform whether the birds are a resident or a new incursion
- their sex. The gender ratio of females to males provides an indication as to whether incursions are predominantly new arrivals (dominated by females) or resident breeding birds (closer to even numbers of females and males)
- their relatedness, which helps inform operations on the likelihood of undetected breeding adults remaining 'at large'.

Incident responses and decision triggers

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

- breeding detected – identification of eggs, nests or fledglings.
- locally bred juveniles – capture of juveniles in the Esperance region that are unlikely to have arrived from outside WA.
- elevated detection rates – capture rates exceeding 80 or more birds above the rolling 10-year average (excluding previous response years).

An incident response is approved by the Director of Invasive Species and Environment Biosecurity. It involves increased surveillance, resourcing and control activities when there are elevated detections of starlings or evidence of breeding as these indicate an increased risk of population establishment.

An incident will be closed when:

- zero starlings are detected or trapped for 6 consecutive weeks in the Esperance region, and
- zero breeding evidence (nestlings, fledglings, juveniles) is detected for 6 consecutive weeks in WA, and
- fewer than 5 starlings per month are trapped for 3 consecutive months in Eucla region.

Actions

Action	Task
Increase awareness	Conduct targeted community awareness campaigns at the start and end of each starling season, using a variety of platforms such as, email, letters, infographics, social media, DPIRD website and rural publications.
Detect	Deploy starling traps in the Eucla region year-round, excluding winter months (June and July) to monitor and intercept birds entering WA via the SA corridor.
	Deploy starling traps across the Esperance region during the spring and summer months to align with the breeding season and typical migratory movements.
	Monitor song meters on acoustic towers for starling song to increase detection capabilities.
	Use GPS tracking devices on captured birds to identify movement patterns and locate undetected individuals.
	Follow up on landholder/public reports of possible sightings of starlings.
	Maintain viable aviary stock over winter to ensure continuity of trapping operations.
	Record all data on surveillance and control activities in the FieldMaps© application.
Declare an incident response	Increase surveillance, resourcing and control activities when triggers for an incident response are met.
Control	Euthanise trapped birds or keep as aviary stock for use as future live lure birds.
	Explore alternative options for control.
Improve capture technology	Investigate trialling automated monitoring of the traps.
	Investigate trap design improvements to increase trap capture rate.
Enhance knowledge of pest	Collect genetic sampling and analysis from all captured birds to improve understanding of starling population genetics and demographics.
Program Evaluation	Evaluate the program at the end of the Plan cycle to ensure program efficiency (every 5 years).
Report and confirm area freedom	Annually report on the starling prevention program, noting ongoing monitoring and evaluation of program activities.