

Action statement

Flora & Fauna Guarantee Act 1988

Plains-wanderer (*Pedionomus torquatus*)

Taxon ID: 10020

Action statements are developed under the *Flora and Fauna Guarantee Act 1988* (FFG Act). Their preparation and implementation complement the FFG Act strategy *Protecting Victoria's Environment – Biodiversity 2037* and its vision that “Victoria’s biodiversity is healthy, valued and actively cared for”.

Species and Distribution



Plains-wanderer. Image by Peter Watts.



This habitat distribution model displays the indicative range of the Plains-wanderer based on occurrence records and likely habitat. See [NatureKit](#) for an interactive map. The Plains-wanderer also occurs outside of Victoria.

Conservation Status

Critically endangered

Listing criteria: 3.1.1 of the Flora and Fauna Guarantee Regulations 2020.

This means that:

- The Plains-wanderer has undergone, is suspected to have undergone, or is likely to undergo in the immediate future, a very severe reduction in population size.

Corresponding International Union for the Conservation of Nature (IUCN) criteria: A2a.

More information on IUCN listing criteria can be found here: [IUCN Red List of Threatened Species](#)

Species Information

Species information such as its description, distribution, ecology and references are provided in the [Plains-wanderer EPBC Conservation Advice](#).

Threats

Threats listed below have been identified through expert consultation, published literature and spatial analysis.

Threat	Description
Habitat loss, degradation or modification	
Land use change	<ul style="list-style-type: none"> The historical and continued conversion of land from native grassland (Victorian Volcanic Plains and Murray Valley Plains Grasslands) to introduced pasture, cropping and urban development results in habitat loss, degradation and fragmentation. These changes in species composition make vegetation structure more dynamic in response to rainfall and increase the complexity of managing habitat to provide appropriate biomass and percentage of bare ground suitable for Plains-wanderer.
Livestock	<ul style="list-style-type: none"> Inappropriate grazing regimes have the potential to negatively impact upon the species' habitat.
Loss of key habitat features	<ul style="list-style-type: none"> Plains-wanderers have specific preferences for grassland habitat structure and composition; preferring sparse grasslands with approximately 50% bare ground, most vegetation less than 5 cm in height, with widely spaced plants up to 30 cm high. In the absence of suitable disturbance regimes (a combination of fire and total grazing pressure), these preferences may not be met, resulting in reduced habitat availability.
Vegetation clearing or damage	<ul style="list-style-type: none"> Illegal removal of native grassland habitats results in both the risk of mortality through direct interaction with machinery, as well as habitat loss.
Climate change	
Extreme weather	<ul style="list-style-type: none"> High rainfall years, storms and flooding can cause mortality and degrade habitat. Overgrowth of habitat following high rainfall/flooding events is particularly problematic in the absence of suitable disturbance regimes to manage biomass.
Increased frequency and/or length of droughts	<ul style="list-style-type: none"> Frequent and long droughts degrade habitat, particularly when in association with inappropriate grazing regimes that damage habitat under drought stress.
Introduced species	
Introduced plants	<ul style="list-style-type: none"> Introduced plants change the structure and composition of foraging habitats, degrading habitat, and may reduce food availability.
Introduced predators	<ul style="list-style-type: none"> Predation by feral cats (<i>Felis catus</i>) and foxes (<i>Vulpes vulpes</i>) is assumed to lead to mortality.
Population dynamics	
Loss of genetic diversity	<ul style="list-style-type: none"> The Plains-wanderer is ranked as 'Very High' on the Genetic Risk Index, indicating low genetic health of the species. The species is genetically unique, with no closely related species.
Small population size	<ul style="list-style-type: none"> Populations are restricted to small, isolated habitat patches where low genetic diversity and susceptibility to extreme events (e.g., fires, disease and drought) limit population recovery.

Threat	Description
Fire	
Altered fire regimes	<ul style="list-style-type: none"> • Fire interacts with grassland habitat in important and nuanced ways. High-intensity, large-scale fires can degrade or destroy Plains-wanderer habitat and cause direct mortality. However, a lack of appropriate fire regimes may contribute to excess biomass, reducing the amount of bare-ground and increasing the height of grassy vegetation, changing grassland habitats in a manner that may render them unsuitable for the species. • A hotter, drier climate may increase the likelihood or frequency of bushfire impacting habitat, with the potential to reduce habitat quality and/or extent.
Native species	
Birds	<ul style="list-style-type: none"> • Australian Magpies (<i>Gymnorhina tibicen</i>) and Australian Ravens (<i>Corvus coronoides</i>) are known to kill Plains-wanderer and often occur at elevated densities in agricultural areas. • Several native raptors predate on Plains-wanderer, especially where perching sites such as trees, fences and other structures occur adjacent or within high quality grassland.
Mammals	<ul style="list-style-type: none"> • Over-abundant macropods may degrade habitat due to overgrazing, mainly close to watercourses.
Native plants	<ul style="list-style-type: none"> • In some cases, native plant species, such as River Red gum (<i>Eucalyptus camaldulensis</i>) and Black box (<i>Eucalyptus largiflorens</i>), can degrade habitat by encroaching into grassland areas, changing the habitat structure and composition.
Pollutants and toxicants	
Pesticides	<ul style="list-style-type: none"> • Pesticide use (insecticides) can reduce food availability for the Plains-wanderer. This may particularly be the case during wide-scale Australian Plague Locust (<i>Chortoicetes terminifera</i>) control programs.
Human disturbance	
Incidental impacts from hunting	<ul style="list-style-type: none"> • Due to physical similarities and sharing the same habitat with game species, such as Stubble Quail (<i>Coturnix pectoralis</i>), hunting may impact the Plains-wanderer through off-target mortality and disturbance.
Recreational activities	<ul style="list-style-type: none"> • This species is of high interest to birdwatchers and photographers. Habitat damage, interference with wildlife, and disruption of research and monitoring activities may occur when these activities are undertaken without effort to minimise disturbance to the birds and their habitat.

Conservation Objectives

Conservation objectives are informed by the conservation status and criteria under which the species was listed under the FFG Act. This provides a framework to understand how we can work towards recovery and improve the species' conservation status over time as per the objectives of the FFG Act.

The key objectives of this action statement are:

- Mitigate threats to populations and habitat to increase resilience, increase genetic fitness and minimise future population decline.
- Increase knowledge of biology, ecology, distribution, demography, emerging threats, and conservation requirements.
- Support community participation and improve awareness of the Plains-wanderer and conservation of its habitat.

Conservation Actions

The actions below have been identified through expert consultation, published literature and spatial analysis. Actions are listed in alphabetical order to allow all interested parties to prioritise based on their context, capacity and capability. Landscape scale actions may mitigate threats for other species. For more information on where to undertake actions that benefit multiple species and identify the most beneficial locations to undertake actions for this species, please refer to [NatureKit](#).

Action	Description
Biomass management	<ul style="list-style-type: none"> • Manage habitat structure and composition as required using ecologically and culturally appropriate means. • Implement the outcomes of habitat restoration and species management research to continue to improve practices.
Community engagement and awareness	<ul style="list-style-type: none"> • Continue to build landholder and broader community awareness of the species, its habitat and management needs. Provide guidance on the changes to pesticide use and grazing that may be required to support recovery of the species. • Continue to support participation from relevant stakeholders and land managers in habitat management, threat abatement and monitoring activities.
Compliance and enforcement	<ul style="list-style-type: none"> • Undertake risk-based compliance and enforcement activities to limit the impact of illegal native vegetation removal and limit off-target impacts of quail hunting to the species.
Conservation management planning	<ul style="list-style-type: none"> • Design and implement a grasslands habitat management strategy that includes identification of appropriate management regimes to maintain habitat for Plains-wanderers.
Control introduced plants*	<ul style="list-style-type: none"> • Implement effective management and control of introduced plants that are, or might become, a significant threat to the Plains-wanderer's habitat.
Control introduced predators*	<ul style="list-style-type: none"> • Implement effective management and control of foxes and feral cats.
Ex-situ management	<ul style="list-style-type: none"> • Support the captive breeding strategy and establish an effective captive population of Plains-wanderers.
Manage problematic native plants	<ul style="list-style-type: none"> • Implement effective management of native plants such as River Red Gum and Black Box, when encroachment becomes a threat to the habitat.
Manage public access	<ul style="list-style-type: none"> • Limit visitor access to more sensitive areas to prevent human disturbance, including from recreational activities such as birdwatching and photography.

Action	Description
Permanent protection	<ul style="list-style-type: none"> Investigate incentives, voluntary agreements, covenants and other permanent protection measures to protect and restore habitat.
Policies and procedures	<ul style="list-style-type: none"> Develop policies and procedures to support the use of less harmful alternatives for controlling Australian Plague Locusts.
Protect key habitat	<ul style="list-style-type: none"> Consider the habitat requirements of Plains-wanderer in decision making processes around land use change, agricultural intensification, and proposed vegetation clearance. Review and investigate appropriate application of regulatory mechanisms to increase protection of Victorian Volcanic Plains and Murray Valley Plains Grasslands.
Research	<ul style="list-style-type: none"> Investigate the movement and dispersal of birds following deterioration in habitat structure and the efficacy and persistence of released captive bred birds. Research to better understand the impacts of introduced and native predators on Plains-wanderers' populations and the effectiveness of different methods of control introduced predators. Develop a Population Response Model for the Plains-wanderer to inform the ongoing management of a captive breeding program for the species. Research the roles of burning and slashing in maintaining and improving the condition of Plains-wanderer habitat in national parks and reserves, and other areas managed for conservation. Further research is required into the effects that various fire regimes have on habitat availability, food resources available to the species and the reproductive success of small populations. Continue research to understand best-practice habitat management approaches.
Restoration and/or revegetation	<ul style="list-style-type: none"> Restore modified grassland habitats using an adaptive management approach, applying ecologically and culturally appropriate techniques including fire management, revegetation, and appropriate biomass management.
Survey and monitoring	<ul style="list-style-type: none"> Monitor habitat structure and condition where birds are present to inform management actions. Expand surveys to determine the range and abundance of Plains-wanderer within habitat distribution models.
Translocation	<ul style="list-style-type: none"> Continue the experimental translocation trial commenced in 2021 to identify suitable methods and procedures for captive-to-wild translocations. Sites are chosen for existing habitat management and protection, with a view towards future release programs to augment the wild population.

**Indicates landscape-scale actions that may deliver benefits to multiple species*

Past actions

The key conservation management actions listed below have been delivered in the past 10 years.

Past action	Description
Biomass management	<ul style="list-style-type: none"> Responsive grazing has been implemented on public and private land to manage habitat structure and composition aligned with the preferences of the Plains-wanderer.
Community engagement and awareness	<ul style="list-style-type: none"> Community is involved in spotlighting events, survey and monitoring, weed and predator control, education of other stakeholders and other activities. 'No Shooting' signs have been erected in key habitat areas. An information package has been developed for quail hunters, showing how to distinguish Plains-wanderers from game species of quail and how to report sightings to relevant government department.
Conservation management planning	<ul style="list-style-type: none"> The National Recovery Plan for the Plains-wanderer was published in 2016.
Control introduced plants	<ul style="list-style-type: none"> Management of introduced plants (e.g., Boxthorn removal) across the Plains-wanderer range has been undertaken.
Control introduced predators	<ul style="list-style-type: none"> Fox and cat control has been undertaken in a reserves and private properties that provide habitat for Plains-wanderer.
Establish/maintain Recovery Team	<ul style="list-style-type: none"> National and state Plains-wanderer Recovery Teams have been established.
Ex-situ management	<ul style="list-style-type: none"> A tri-state (Victoria, NSW and South Australia) captive breeding program for Plains-wanderers has commenced for release and insurance against loss of wild populations. Animal husbandry practices have been developed and refined. Experimental trial of translocation of captive-bred birds to core range areas has been undertaken.
Permanent protection	<ul style="list-style-type: none"> More than 600 ha of grassland has been permanently protected under covenant in priority locations.
Research	<ul style="list-style-type: none"> A project is underway examining best practices for habitat management to quantify impact of introduced predators on wild populations. Research is underway to model population dynamics using new monitoring techniques including bioacoustics monitoring and investigation of thermal detection techniques. Range-wide distribution modelling has been undertaken to identify changes in habitat between years and identify potentially under-studied habitat.
Restoration and/or revegetation	<ul style="list-style-type: none"> Revegetation of key grassland habitat has been undertaken. Multiple projects have been undertaken to identify suitable and occupied habitat on public and private land. Threat management programs including engagement activities are underway to control biomass (e.g. ecological grazing), fencing and provision of water points to improve habitat condition and manage weeds.

Past action	Description
Survey and monitoring	<ul style="list-style-type: none">• New technologies, such as thermal cameras, radio transmitters, drones and bioacoustic monitoring devices, have been incorporated into survey and monitoring programs.• Ongoing monitoring of habitat structure has occurred in response to habitat management and monitoring of Plains-wanderer encounter rates.• Regular assessments of suitability of habitat for Plains-wanderer have been undertaken in the past 10 years.• Regular monitoring of abundance/extent of Plains-wanderer has been undertaken in the past 10 years.

Decision Support Tools

Decision making for conservation actions is supported through the following Victorian Government tools which may be of assistance in choosing the most appropriate or beneficial actions for biodiversity:

- [Choosing actions for nature: NatureKit](#)
- [Biodiversity Knowledge Framework](#)

Further Information

- [Plains-wanderer Species Forecast Report](#)
- [Conservation Advice – Plains-wanderer](#)
- [Commonwealth Species Profile and Threats database](#)
- [Victoria's changing climate – understanding the impacts of climate change in Victoria](#)
- [Genetic Risk Index](#)
- [Commonwealth Threat Abatement Plans](#)
- [Flora and Fauna Guarantee Regulations 2020](#)
- [IUCN criteria summary](#)

Get Involved and Take Action

If you are interested in supporting this species' recovery, there are some important things you need to consider.

The Department of Energy, Environment and Climate Action (DEECA) is committed to engaging and partnering with Traditional Owners on how they wish to be involved in the planning and implementation of actions for this species. Steps must be taken to avoid harm and where appropriate ensure actions can deliver cultural benefits.

You can find advice about required approvals, land manager and/or owner permissions, options and incentives for private land conservation, and engagement with Traditional Owners and public land managers here: [Action statements \(environment.vic.gov.au\)](#)

To identify the relevant Traditional Owners, use the [Aboriginal Cultural Heritage Register and Information System \(ACHRIS\) Welcome to Country and Acknowledgements Map](#).

You can also register your interest in taking action so we can connect you to other people or organisations working to help us secure the future for this species at threatened.species@deeca.vic.gov.au

Reporting Actions

Activity data is critical to monitoring the implementation and progress of actions and evaluating action statements. These data are also used to:

- Determine progress towards achieving the contributing targets for [Protecting Victoria's Environment – Biodiversity 2037](#).
- Inform the five-yearly State of the Environment Report.

For guidance on reporting actions undertaken on this species, refer to [Activity Data](#).

Submitting Monitoring Data

The Victorian Biodiversity Atlas (VBA) provides a foundational dataset showing where biodiversity occurs across the Victorian landscape and how it may have changed over time. As a core input for decision support tools that inform conservation action, public land management, research activities and reporting, we encourage all participants in the delivery of on-ground actions to submit species records and observations, including for introduced plants and animals, as they carry out their projects.

For further information see: [Victorian Biodiversity Atlas \(environment.vic.gov.au\)](#)

Sign up and begin submitting your data today at: <https://vba.biodiversity.vic.gov.au/>

Acknowledgment

We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria's land and waters, their unique ability to care for Country and deep spiritual connection to it. We honour Elders past and present whose knowledge and wisdom has ensured the continuation of culture and traditional practices.

We are committed to genuinely partner, and meaningfully engage, with Victoria's Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.



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