Action statement

Flora & Fauna Guarantee Act 1988

Hooded Plover (Thinornis cucullatus)

Taxon ID: 10138

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



Hooded Plover. Image by Dan Pendavingh.



This habitat distribution model displays the indicative range of the Hooded Plover based on occurrence records and likely habitat. See NatureKit for an interactive map. The Hooded Plover also occurs outside of Victoria.

Conservation Status

Vulnerable

Listing criteria: 5.1.2(a), (b)(ii,iii,v); 5.1.3(a) of the Flora and Fauna Guarantee Regulations 2020.

This means that:

- the Hooded Plover's geographic distribution is restricted; and
- the distribution of the population or habitat of the taxon is severely fragmented; and
- there is a continuing decline or reduction in:
 - its area of occupancy; and
 - the area, extent or quality of habitat; and
 - the number of mature individuals; and
- the total number of mature individuals is moderately low, and the number is likely to continue to decline at a substantial rate.

Corresponding International Union for the Conservation of Nature (IUCN) criteria: B1ab(ii.iii.v); C1.

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 <u>Hooded Plover</u> Conservation Advice.

Threats

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

| Threat | Description |
|---|---|
| Human disturbance | |
| Construction, development and/or infrastructure | Coastal development and construction of seawalls and other types of coastal protection projects have the potential to directly remove habitat, and reduce the capacity for dunes to retreat, limiting available habitat as sea levels rise. The placement of beach access paths can direct people (including pets and horses) into breeding areas, leading to increased crushing risk and disturbance. |
| Recreational activities | Beach-based recreational activities such as dog walking, horse-riding, vehicle use, hang gliding and drone use can directly impact breeding success through disturbance to breeding adults and direct mortality of eggs and young. |
| Introduced species | |
| Introduced plants | Invasion by environmental weeds such as Sea Spurge (Euphorbia paralias), Marram Grass (Ammophila spp.), Sea Wheat-grass (Thinopyrum junceiforme) and Beach Daisy (Arctotheca populifolia) reduce availability of nesting, roosting and foraging habitat by covering large areas of the beach and altering dune morphology. These weeds also increase erosion and limit capacity of dunes to naturally retreat. |
| Introduced predators | Foxes (Vulpes vulpes) prey on eggs, chicks and adults. |
| | Feral cats (Felis catus) may also prey on the species. |
| Native species | |
| Birds | Where ravens (Corvus spp.), magpies (Gymnorhina spp.) and Silver Gulls (Chroicocephalus novaehollandiae) become over-abundant and forage on beaches regularly, they can be responsible for high rates of nest failure. |
| Climate change | |
| Extreme weather | Increases in storms, storm surges and wave characteristics as a result of a changing climate can cause erosion, habitat degradation and may also impact survival of nests and young. |
| Sea-level rise | Sea-level rise combined with coastal development and engineering works can prevent the landward migration of coastal habitats, resulting in partial or complete erosion of beaches with consequent loss of habitat. |
| | It is unknown how sea-level rise will affect accumulation of organic matter on beaches (beach wrack), which provides cover and foraging habitat for the Hooded Plover. |
| Temperature extremes | A hotter climate, with more extreme heat days, will likely result in mortality of eggs and chicks, and may impact the timing of the breeding season. |

| Threat | Description | |
|---|---|--|
| Habitat loss, degradation or modification | | |
| Loss of key habitat features | Beach wrack collection may lead to disturbance or damage to Hooded Plover habitat and nesting sites. | |
| | Erosion control practices that cover exposed dunes with branches, weed matting, and/or revegetation can remove areas of bare sand required for nesting. | |
| Pollutants and toxican | nts | |
| Hydrocarbon contamination | Marine pollution and oil spills, though infrequent, have potential to have a high impact from toxicity and smothering of chicks and adults. | |
| Litter | Food scraps and associated litter attracts predators in Hooded Plover habitat. Entanglements in marine debris may also occur. | |

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 the wild population size to at least 700 mature individuals within Victoria.
- Increase knowledge of biology, ecology, distribution, demography, emerging threats, and conservation requirements.
- Support community participation and improve awareness of the Hooded Plover 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 |
|------------------------------------|--|
| Community engagement and awareness | Maintain active community education programs to improve awareness and engagement in conservation actions for the Hooded Plover, including adoption of beach recreation behaviours that are supportive of the species' needs. |
| Compliance and enforcement | Undertake risk-based compliance and enforcement activities to limit the impacts of recreational beach-based activities to the species. |
| Control introduced plants* | Implement effective management and control of introduced plants in breeding locations and re-plant with Hairy Spinifex (Spinifex sericeus) to enhance suitability of dunes. |
| Control introduced predators* | Implement effective management and control of foxes and feral cats in priority areas. |

| Action | Description |
|---|---|
| Emergency Response | Prepare oil spill response plans to ensure effective rehabilitation of oiled birds. |
| Protect key habitat | Consider the ecological requirements of Hooded Plover in the planning and design of coastal developments, erosion control works, adaptation works and beach access points. |
| | Install protective fencing and signage around breeding sites (nest and chick sites) following best practice installation methods to prevent crushing and provide a buffer from disturbance. |
| | Plan beach events and permitted recreational activity around critical breeding and nesting periods. |
| Reduce litter | Reduce in-shore marine debris and litter, including educating fishers and the public on proper disposal of fishing lines. |
| Research | Identify the causes of chick mortality and factors that may mediate survival rates. |
| | Identify habitat availability and risk of habitat loss due to weed invasion and dune morphology changes. |
| | Investigate sea level rise impacts on future habitat availability, and options for coastal retreat. |
| Survey and monitoring | Monitor to determine trends in Hooded Plover population size, breeding success, mortality rates, genetic health, status of breeding populations, levels of nest predation, and effectiveness of threat management measures. |
| | Include populations in different geographic areas, facing different threat profiles, in monitoring programs. |
| Undertake population viability analysis | Undertake a population viability analysis to set breeding success targets for recovery programs. |

^{*}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 |
|------------------------------------|---|
| Community engagement and awareness | BirdLife Australia, supported by Parks Victoria, has established and maintained active community engagement and education campaigns for this species, including establishing and supporting Friends of the Hooded Plover (FoHP) groups across Victoria. |
| | Permanent interpretive species signs have been installed at park access points, including Mornington Peninsula National Park and Point Nepean National Park, where walking tracks lead to known breeding and flocking sites. |
| Compliance and enforcement | Operation SoHo was established in 2021 to improve state-wide compliance with the Wildlife Act 1975 and local beach regulations for dog walkers around Hooded Plover breeding sites. |
| | My Beach Bird portal and consultation with local land managers is used to guide compliance activity. |

| Past action | Description |
|------------------------------|--|
| Control introduced plants | Targeted control programs have been implemented at various locations to reduce the impacts of introduced plants including Sea Spurge, Marram Grass, Beach Daisy and Sea Wheat-grass. |
| Control introduced predators | Landscape scale and targeted predator control programs have been implemented at various locations including Gippsland, Bass Coast, Mornington Peninsula, Geelong City, and Discovery Bay. |
| Protect key habitat | Dog regulations have been changed at multiple beaches to protect breeding Hooded Plovers. These include dog exclusion zones during breeding season, total bans and development of a flexible bylaw where dogs must be on-lead within 100 m of a fenced/signed breeding area. |
| | Estuary openings, beach walks and runs, surf carnivals, and permits for beach events have been integrated into Hooded Plover response plans to minimise risks to nests and chicks. |
| | Temporary fencing and signs have been placed around nesting sites to minimise human disturbance during breeding season. |
| | Inclusion of adaptive Hooded Plover management practices have been included in local land management plans. |
| Research | Social research has occurred to understand the drivers and opportunities to change human behaviour at beaches. |
| | Research, and site-specific reviews, have been undertaken to understand the prevalence and impacts of threats, and effectiveness of various threat mitigation measures. |
| | An analysis of population genetics has been undertaken across the Victorian coast. |
| | Research has been undertaken to improve ecological understanding including the habitat variables that determine breeding and non-breeding habitat suitability and management options to improve habitat. |
| Surveys and monitoring | Population monitoring was undertaken including leg-flagging of Hooded Plovers across Victoria, and radio-tracking in some locations, along with biennial counts across the range, to understand demographics including mortality rates, dispersal, sex biases, and breeding ecology. |
| | Citizen science participation has occurred in monitoring of over 200 sites, with data collected online via the My Beach Bird portal. |

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
- CoastKit

Further Information

- Hooded Plover Species Forecast Report
- Conservation Advice Hooded Plover (Thinornis cucullatus)
- 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: <u>Action</u> statements (environment.vic.gov.au)

To identify the relevant Traditional Owners, use the <u>Aboriginal Cultural Heritage Register and Information System</u> (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 <u>Protecting Victoria's Environment Biodiversity 2037</u>.
- 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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