Action statement

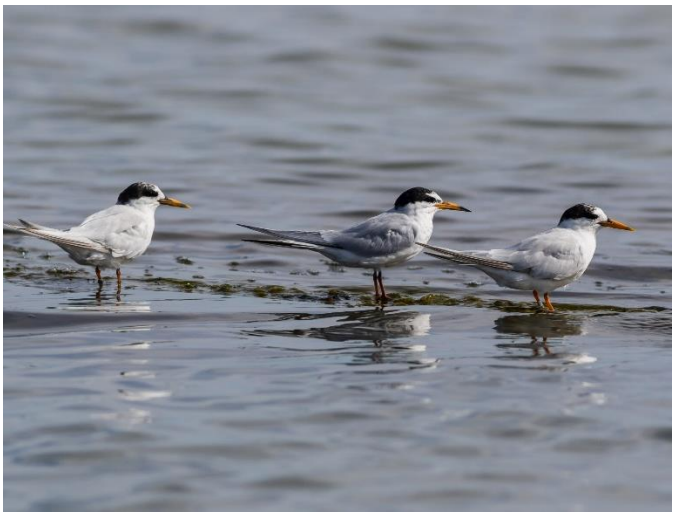
Flora & Fauna Guarantee Act 1988

Little Tern *(Sternula albifrons)*

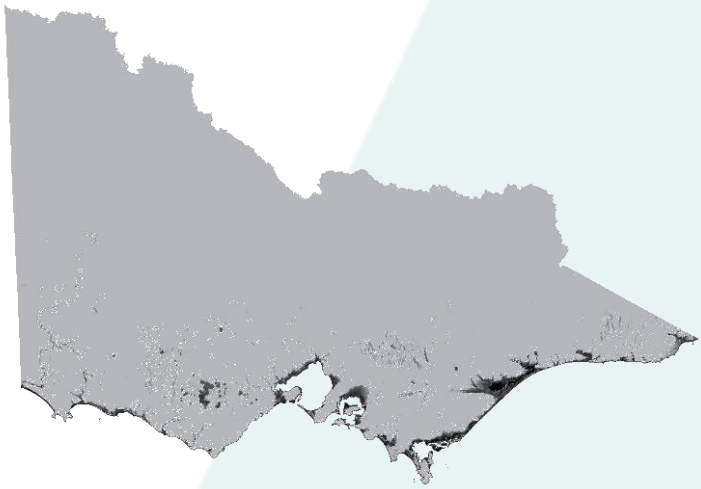
Taxon ID: 10117

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



Little Tern. Image by Sam Gordon.



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

Conservation Status

Critically endangered

Listing criteria: 3.1.3(b)(ii) of the Flora and Fauna Guarantee Regulations 2020.

This means that:

- The total number of Little Tern's mature individuals is very low, the number is likely to continue to decline and most of the individuals are in one subpopulation.

Corresponding International Union for the Conservation of Nature (IUCN) criteria: C2a(ii).

More information on IUCN listing criteria can be found here: IUCN Red List criteria.

Species Information

Species information such as its description, distribution, ecology and references are provided in the Little Tern Species Forecast Report.

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 has the potential to destroy and degrade Little Tern habitat and form barriers that impede landward migration of habitat. When combined with sea-level rise, barriers may result in partial or complete erosion and loss of shoreline habitats in some locations.
Recreational activities	• Little Tern are highly susceptible to human disturbance when nesting, through loss of eggs and chicks by trampling and keeping parents away from the nest through prolonged periods of disturbance. • Recreational activities such as walking, dog walking, fishing, boating, wind-powered recreational craft, and jet-skiing may damage habitat and alter the behaviour of native species, potentially impacting recruitment and mortality rates, and/or persistence at the site.
Climate change	
Extreme weather events	• Climate change may increase the frequency and intensity of storms and flooding, increasing erosion of sand banks, spits and islets used for roosting and nesting. These events may impact habitat condition, and potentially cause mortality events or disruption to breeding.
Sea-level rise	• Sea-level rise will lead to habitat alteration, shifting and/or loss, and when combined with coastal development and engineering works, can prevent the landward migration of coastal habitats, resulting in partial or complete erosion of shorelines with consequent loss of habitat. • Nests can fail when eggs or chicks are washed away by king tides, rough seas, rising lake water or river levels. This may impact or prevent breeding at some sites.
Temperature extremes	• Climate change may increase the frequency and duration of heat-wave events, leading to increased risk of mortality.
Water properties	
Altered sea water exchange	• Changes to estuarine morphology and hydrology (including sea and freshwater exchange) can impact habitat connectivity, alter ecosystem structure and function, and lead to a loss of breeding and roosting habitat, and/or reduced food availability (bait fish). Deoxygenation events may also occur, leading to mortality of bait fish, and impacting food supply.
Introduced species	
Introduced plants	• Introduced plants change the structure and composition of native habitats, resulting in changes to habitat extent and/or condition. • The invasive plants Marram Grass (*Ammophila arenaria*), Sea Wheat-grass (*Thinopyrum junceiforme*), and Sea Spurge (*Euphorbia paralias*) can modify Little Tern habitats and potentially make breeding and nesting sites unsuitable. Care must be taken to ensure any removal of introduced plants does not increase predation risk for Little Tern.

Threat	Description
Introduced predators	• Predation by foxes (*Vulpes vulpes*), feral cats (*Felis catus*) Black Rats (*Rattus rattus*) and Norwegian Rats (*Rattus norvegicus*) contribute to the mortality of Little Tern, particularly at nesting sites on mainland beaches.
Native species	
Over-abundant predatory birds	• Silver Gull (*Chroicocephalus novaehollandiae*) are a major native predator of eggs and small chicks. Silver Gulls may have higher predation success following human disturbance in nesting areas. • Other avian predators include Pacific Gull (*Larus pacificus*) and Australian Raven (*Corvus coronoides*). Forest Raven (*Corvus tasmanicus*) and Kelp Gull (*Larus dominicanus*) are also potential threats.
Problematic native plants	• As with introduced plants, some over-abundant native plants can also change the structure and composition of Little Tern habitat, potentially making breeding and nesting sites unsuitable.
Population dynamics	
Loss of genetic diversity	• Small and/or greatly reduced populations are at increased risk of loss of genetic diversity, which leads to a heightened risk of reduced recruitment and/or increased mortality rates.
Small population size	• Small populations have lower resilience to the risk of stochastic events, and increased risk of genetic decline.
Pollutants and Toxicants	
Litter	• Marine debris including discarded fishing line and hooks, plastic fragments, packaging, and containers, as well as marine rope fragments leads to habitat degradation, and ingestion and/or entanglement and can cause injury and/or mortality.
Oil spills	• Oil spills can lead to hypothermia or poisoning through ingestion and can cause mortality.

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, improve genetic fitness and minimise future population decline.
- Increase the Little Tern's range and/or extent, by providing opportunities for natural movement.
- Detectable increase in the wild population size of mature individuals.
- Establish at least two new viable breeding colonies within its historic range.
- Increase knowledge of biology, ecology, distribution, demography, emerging threats, and conservation requirements.
- Support community participation and improve awareness of the Little Tern 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	• Continue to identify, promote and support opportunities for community involvement in Little Tern conservation efforts. • Continue to raise landholder and broader community awareness of the importance of protecting Little Tern habitat and managing threats. For example, conduct community education programs during each breeding season to increase awareness of threats and erect signs around nesting sites warning of the presence of nesting and resting Little Tern.
Control introduced plants*	• Implement and maintain effective control of introduced plants in priority areas and, if appropriate, undertake revegetation with suitable native species.
Control introduced predators*	• Implement and maintain effective control of feral cats and foxes in priority areas. Breeding colonies should be prioritised for predator control.
Control introduced rodents	• Implement and maintain effective control of introduced rodents in priority areas. Breeding colonies should be prioritised for rodent control.
Manage environmental water	• Consider the Little Tern's presence and ecological needs when enacting estuary management plans that trigger artificial estuary mouth opening. • Manage estuary water regimes and water quality to support retention, restoration and/or creation of Little Tern habitat and/or population persistence.
Manage problematic native species	• Manage waste at towns and facilities close to breeding areas to discourage aggregations of gulls and ravens and minimise their impact on Little Tern breeding colonies.
Manage public access	• Manage public access to limit the risks of human disturbance. For example, using a combination of fences and buffer zones around breeding colonies and high-tide roost sites to limit human disturbance from land recreational activities.
Manage the impacts of litter	• Promote programs that aim to prevent litter impacting terrestrial and freshwater environments.
Minimise and mitigate the impacts of pollution	• Require all vessels to have oil spill mitigation measures in place and implement jurisdictional oil spill response strategies when required.
Protect key habitat	• Ensure that Little Tern distribution data and ecological information is available and considered in planning for developments, land use changes and utilities maintenance. Ensure that incremental losses are included in consideration of potential losses.

Provide artificial habitat features	• Consider social attraction techniques to establish new breeding colonies including assessing the potential use of decoys and tape lures. • Support population persistence through provision of habitat features in areas where habitat is lacking. For example, explore opportunities to create nesting sites (including islands).
Research	• Determine non-breeding areas and migration routes for the Victorian breeding population. • Improve understanding of, and develop guidelines for, Little Tern habitat restoration and management approaches. • Improve understanding of population dynamics (e.g., sex ratios, recruitment, causes of mortality) to inform management priorities. • Increase understanding of genetic risks and management options. • Investigate the use of hydrological models to identify, create and manage future suitable nesting habitats at estuaries and coastal lagoons, and the development of nest sites above spring tide levels. • Trial new anti-predation techniques such as olfactory misinformation and manipulation of the nesting substrate. • Undertake more definitive analysis of taxonomy to clarify the taxonomic status and relationships between the Victorian breeding population and migratory populations.
Survey and monitoring	• Monitor Little Tern populations and breeding success at known sites and other suitable locations to assess distribution, population trends and habitat condition. • Monitor the impact of threats to inform management interventions. Monitor the impact of Silver Gulls and other predatory species on breeding colonies. • Monitor the effectiveness of mitigation measures such as fencing and signage at key sites.

**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
Control introduced plants	• Work undertaken with land managers to implement remedial weed control programs.
Control introduced predators	• Undertaken active management of introduced predators at breeding colonies.
Manage public access	• Installation of temporary signs and fencing to help minimise disturbance events.
Survey and monitoring	• Monitoring of threats to nesting colonies via remote cameras and direct observations by volunteers. • Monitoring at key breeding sites to determine local population trends.

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

- Little Tern Species Forecast Report
- Threatened Species Assessment report – Little Tern (*Sternula albifrons*)
- Commonwealth Species Profile and Threats database
- Victoria's changing climate – understanding the impacts of climate change in Victoria
- Commonwealth Threat Abatement Plans
- Genetic Risk Index
- Flora and Fauna Guarantee Regulations 2020
- IUCN Red List criteria descriptions

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.

ISSN 1448-9902 **(online)**

Accessibility

If you would like to receive this publication in an alternative format, please telephone the DEECA Customer Service Centre on 136186, email customer.service@delwp.vic.gov.au or via the National Relay Service on 133 677 www.relayservice.com.au. This document is also available on the internet at www.environment.vic.gov.au