

Environmental Standard – Birds

1. PURPOSE

The purpose of this Environmental Standard is to define the minimum standard accepted by the Tasmanian Ports Corporation Pty Ltd (“TasPorts”) to manage nuisance bird behaviour at **TasPorts Facilities** to ensure compliance with legal requirements and community expectations to protect native wildlife, treat animals humanely and prevent **environmental harm** or **environment nuisance**.

2. SCOPE

This Standard applies to TasPorts staff, contractors, customers, licensees, tenants and port users planning to undertake bird management activities at TasPorts Facilities. Such activities include, but are not limited to:

- *Prevention measures* such as installation of physical structures and barriers to prevent birds from nesting, **roosting** and **loafing**;
- *Deterrent measures* such as installation of devices or use of methods to deter birds from nesting, roosting and loafing;
- *Monitoring* of bird activity and numbers to assess the effectiveness of prevention and deterrent strategies and to enable early intervention and proactive management;
- *Reactive non-lethal measures* to scare away birds and destroy nests and eggs; and
- *Reactive lethal measures* such as limited culling to deter flocks and **nestling** destruction.

3. OBJECTIVES

The objectives of this Standard are to ensure that bird management activities undertaken at TasPorts Facilities are planned and conducted in a manner that:

- 1 Prioritises measures in accordance with the following hierarchy of control:
 - i. Prevention
 - ii. Deterrence
 - iii. Reactive non-lethal
 - iv. Reactive lethal
- 2 Complies with all applicable legal and other requirements; and
- 3 Promotes the use of the most effective available humane methods.

4. BIRD IMPACTS

Most TasPorts Facilities experience issues with nuisance bird behaviour where their presence can result in problematic impacts on port users and infrastructure due to aggressive bird behaviour and faeces contaminating work areas, plant and equipment.

The most significant impacts from birds occurs during the breeding season from late August to late December but can extend to February depending on the season and if eggs laid in late December hatch.

Adverse impacts include:

- Fouling of workplaces and the potential exposure of employees and contractors to disease;
- Aggressive bird behaviour and the potential for injury to employees and contractors;
- Contamination of cargo due to fouling and potential biosecurity risks for cargo destined for environmental sensitive locations such as the Antarctic;
- Clean-up effort and cost;
- Deterioration of infrastructure;
- Complaints from Port users and the public; and
- Inadvertent injury and death of birds due to interaction with cargo and machine operation (eg nesting within log stockpiles)

Birds are attracted to, and will nest, in areas that are quiet and provide easy access and a view of the surrounding area. Areas within ports that attract nesting birds include:

- areas where there is little movement of plant or people;
- roofs, ledges and gutters of buildings;
- disused plant and equipment;
- moored vessels;
- rock walls and navigation aids; and
- log stockpiles

In addition to the introduced pigeons and common starlings that frequent TasPorts Facilities, some native birds such as silver gulls, kelp gulls, pacific gulls and cormorants, can develop nuisance behaviours.

5. LEGAL AND OTHER REQUIREMENTS

The laws and other requirements that may be applicable to the management of birds at TasPorts Facilities, include but are not limited to:

- *Nature Conservation Act 2002 and Wildlife (General) Regulations 2010*
 - require a *Permit To Take Protected Wildlife* be obtained from the Department of Primary Industries Parks Water & Environment (DPIPWE) before any person can kill, catch, collect or destroy a native bird, nest, egg or nestling
- *Animal Welfare Act 1993*
 - requires that the treatment of wildlife must not cause unreasonable and unjustifiable pain or suffering to the animal
 - lists approved substances that may be administered to pest animals for the purpose of pest control
- *Environmental Management and Pollution Control Act 1994 (“EMPCA”)*
 - prescribes that any person has a general environmental duty to take such steps as are practicable or reasonable to prevent or minimise environmental harm or environmental nuisance caused, or likely to be caused by an activity (i.e. noise generation) conducted by that person (“**General Environmental Duty**”).
- *Agricultural and Veterinary Chemical (Control of Use) Act 1995*
 - requires entities that provide a service that involves the application of agricultural or veterinary chemicals to hold a *Commercial Operator Licence* issued by DPIPWE
 - requires that any person who applies chemical products for a licensed Commercial Operator must have a *Certificate of Competency* relevant to the type of work they perform
- *Guidelines for the safe use of pesticides in non-agricultural workplaces 2007 (DPIPWE)*
 - provides practical and informative guidance for people working in pest management on how to comply with legislation relating to the use of pesticides
- *Firearms Act 1996*
 - provides for the regulation, registration and control of firearms in Tasmania
 - requires firearm owners to hold a *Firearms Licence* obtained from Tasmania Police
- *Local Council noise guidelines*
 - Municipal councils regulate the use of noise generating devices such as acoustic bird scarers and gas guns

6. REQUIREMENTS

6.1. Bird Management Plan

A port or site specific *Bird Management Plan* ("Plan") shall be developed for all TasPorts Facilities that are routinely required to take action to prevent or respond to birds causing nuisance impacts.

A Plan should include the following elements:

- Definition of the bird management issue, such as:
 - The actual or potential adverse impacts caused by bird activity
 - When and where the issue occurs
 - Who is responsible for managing the issue
 - The bird species present: the species causing adverse impacts and species present that need to be protected
- Define the management objectives, such as:
 - Reduce adverse impacts to an acceptable level (quantify if possible)
 - Use the safest, most effective and most socially acceptable methods
 - Protect native bird species
- The management option to be adopted, such as
 - Eradication – permanently eliminating the entire population (this is not appropriate for native species such as gulls or cormorants)
 - Strategic sustained control – sustained effort over an extended period of time to reduce impacts
 - Strategic targeting control – controls implemented only when conditions indicate that it is desirable and the risk of adverse impacts is high
 - Reactive management – control applied as required with no forward planning
 - Do nothing – a viable economic option where the cost of control exceeds the benefits achieved
- The control options chosen to suit the circumstances and when they will be used, with consideration to:
 - Technical feasibility
 - Effectiveness
 - Cost – installation, implementation, operation and maintenance
 - Legal, environmental and social acceptability
- Action implementation schedule
 - Timing of short, medium and long term actions
 - Responsibility for action implementation
 - Cost estimate and budget for action implementation, including anticipated employee hours and contractor costs
 - Details of permits required to be obtained prior to action implementation
 - Details of stakeholder engagement required prior to action implementation
- Monitoring & evaluation
 - Proposed monitoring program to enable:
 - assessment of the effectiveness of specific actions; and
 - assessment of progress towards achieving the specified management objectives
 - Cost estimate and budget for monitoring program implementation

The Manager of a TasPorts Facility requiring a *Bird Management Plan* is responsible for developing the port or site specific plan, in consultation with TasPorts' Environmental Advisors.

Plans that include the use of lethal methods, other than nest, egg and nestling destruction must be approved in writing by the General Manager Landside Operations.

6.2. Bird Control Options

A range of control options are available to manage birds, with most options described, assessed and preliminary costed in the 2019 port-specific, moored vessel and navigation aid nuisance bird strategy reports [Refs 1 – 6], in particular in the following sections of those reports:

- “Site-Specific Management”
- Appendix E: Mitigation Actions
- Appendix F: Management Actions and Timelines

Control options must be chosen with consideration to:

- Technical feasibility
- Effectiveness in addressing the problem
- Cost – installation, implementation, operation and maintenance
- Legal, environmental and social acceptability
- Prioritising options in accordance with the following hierarchy of control:
 - Prevention
 - Deterrence
 - Reactive non-lethal
 - Reactive lethal

6.2.1. Preventative Controls

Preventative controls reduce a site’s suitability for bird habitat and often align with controls needed to satisfy biosecurity first point of entry requirements. Preventative controls include:

- Reducing the availability of food:
 - cover bins
 - clean up spillage of foodstuffs
- Reducing amounts of standing water:
 - fill in depressions where water pools
 - cover gutters to prevent access by birds
- Reducing suitability for nesting, roosting and loafing:
 - Revegetate unused areas with a complex canopy of native vegetation
 - Remove unnecessary scrap and junk piles
 - Decommission unused structures
 - Clean up accumulations of potential nest material (eg bark, wood fibre, rope etc)
 - Cover gutters and other cavities with wire mesh to prevent access by birds
 - Install spikes, wires, rollers, daddy-long-legs, shock tape, nylon nets or metal mesh
- Preventing access to locations for nesting, roosting and loafing:
 - Install nylon nets or metal mesh

6.2.2. Deterrence Controls

Deterrence controls reduce the relative attractiveness or appeal of a site to encourage birds to seek an alternative location for nesting, roosting and loafing and include:

- Kites and flags
- Drones
- Ozone generators
- Lasers
- Sprinklers
- Acoustic devices
- Olfactory repellents
- Bird dogs

A weakness with deterrent controls is **habituation**, where birds exposed to a frequently repeated stimulus realise they are not a real threat and so will eventually ignore them.

Habituation is the single factor that most limits the effectiveness of deterrent controls. Effort is needed to vary controls through such approaches as: frequently moving deterrents to different locations, temporarily removing the deterrents, varying the frequency and time of day that the deterrents are used.

6.2.3. Reactive non-lethal Controls

Reactive non-lethal controls are applied once birds are present in numbers that result in, or have the potential to result in, nuisance adverse impacts. The objective of these controls is to encourage the birds to move away and stay away, and in particular to prevent or stop nesting, without causing harm to the birds.

Non-lethal reactive controls such as the destruction of nests and eggs and egg oiling require a *Permit To Take Protected Wildlife* from the Department of Primary Industry Parks Water and Environment (DPIPWE) when the target species are native birds, such as silver gulls, kelp gulls and cormorants.

Most Deterrence Controls can also be used as Reactive non-lethal Controls, however additional methods include:

- Nest and egg removal
- Egg oiling
- Scare guns
- Shooting-to-scare (eg with blanks)
- Using already dead birds to ward off others

If birds are causing nuisance impacts, nests must be destroyed as soon as possible, preferably before eggs are laid. If eggs are laid they should be destroyed within a few days. Egg oiling if applied correctly can prevent eggs from hatching but will not move birds on.

As with Deterrence Controls, habituation is also a weakness with many non-lethal controls.

There is some evidence that scare gun and shoot-to-scare campaigns can be made more effective over time if dead birds are left in an area when the campaign initially commences, as the birds may associate the sounds with danger. This may make follow-up scare campaigns during the same breeding season more effective even where no dead birds are used.

6.2.4. Reactive lethal Controls

The least preferred method for managing birds at TasPorts Facilities is reactive lethal control.

Reactive lethal controls include:

- Euthanasia of nestlings
- Culling-to-scare
- Culling for population control

A DPIPWE *Permit To Take Protected Wildlife* is required before any lethal control can be used on native birds such as silver gulls, kelp gulls and cormorants.

Culling-to-scare involves the limited professional shooting of a small number of birds, typically around five (5), as part of an otherwise non-lethal scare campaign involving scare guns or shooting. Limited culling may help prevent habituation, as birds may associate the sounds with danger. Follow up campaigns may only occasionally require additional limited culling to prevent habituation.

Culling for population control is not an appropriate, permitted or effective method for managing native birds and so is not a control option for native birds.

For **introduced birds**, culling for population control may be effective for small populations. Culling methods for introduced pest birds include:

- Shooting
- Trapping or netting followed by euthanasia
- Poisoning

6.3. Additional Requirements For Some Controls

6.3.1. Timing of Bird Control Action

The most significant impacts from birds occurs during the breeding season from late August to late December but can extend to February depending on the season and if eggs laid in late December hatch.

Critical dates for maximising control effectiveness are generally as follows and shown in Table 1:

- **Preventative** actions should be in place **by early August** and be maintained throughout the breeding season to avoid attracting birds, prevent bird access and reduce suitability for nesting, roosting and loafing.
- **Deterrent** actions should be **implemented from late August** to reduce the attractiveness or appeal of a site to encourage birds to seek an alternative location for nesting.
 - Maximum effort is required in the initial months to prevent nesting.
 - Efforts should be able to be reduced during January and February if all eggs have been destroyed and there are no nestlings.
 - No action should be necessary from mid February to mid August.
- **Reactive** actions should be **implemented from early September** as soon as birds are present in numbers that result in, or have the potential to result in, nuisance adverse impacts to encourage birds to move on and seek an alternative location for nesting.
 - Maximum effort is required in the initial months to destroy nests and eggs as soon as possible to prevent nesting getting established.
 - Scare methods will be most effective earlier in the season before nesting gets established. Scare methods lose effectiveness once nests have been established and eggs laid.
 - Efforts should be able to be reduced during January and February if all eggs have been destroyed and there are no nestlings.
 - No action should be necessary from mid February to mid August

Timing & effort	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Preventative	Focussed		Maintenance					Focussed - prior to breeding season				
Deterrent	None	Maximum					Maintenance	None				
Reactive	None	Maximum					Maintenance	None				

Table 1: Critical dates for effective bird control action

6.3.2. Permits to Take Wildlife

A *Permit to Take Protected Wildlife* must be obtained from the Department of Primary Industry Parks Water and Environment (DPIPWE) (email: wildlifereception@dpiwwe.tas.gov.au) for any TasPorts Facility before any native wildlife (including nests and eggs) can be killed, injured, caught, destroyed or collected.

In addition, all people and individuals involved in the killing, injury, catching, destroying or collecting of native wildlife must obtain permits from DPIPWE to be an “Agent” on the *Permit to Take Protected Wildlife* for a particular TasPorts Facility.

At all times the treatment of wildlife must be in accordance with the provisions of the *Animal Welfare Act 1993*, so as to not cause unreasonable and unjustifiable pain or suffering to the animal.

Permit holders are responsible for ensuring:

- compliance with permit conditions;
- total take details are collected as required by the permit; and
- total take details are submitted to the Department by the date specified in the permit.

6.3.3. Drones

Drones are restricted in and around TasPorts security regulated ports and surrounding land. All drone flights on TasPorts land and inside any port must be:

- approved by TasPorts Security and Corporate Affairs teams; and
- undertaken by a licensed commercial drone pilot.

Requests to fly drones are to be made via the external TasPorts website:

<https://www.TasPorts.com.au/drone-flight-request>

6.3.4. Acoustic Devices including Scare Guns and Shooting-to-Scare

The use of acoustic devices including scare guns or shooting-to-scare methods must take into consideration:

- impacts on **sensitive noise receptors**;
- local council requirements; and
- TasPorts' Environment Standard – Noise.

Prior to using acoustic devices including scare guns or firearms, the TasPorts regional Operations Manager responsible for the TasPorts Facility must notify and consult with the following:

- Environmental Advisors: who will notify DPIPWE if the target species is native wildlife
- Corporate Affairs: for advice on a communications strategy with neighbours and to prepare for potential media enquiries, in particular if members of the public are concerned that shooting may be being undertaken to cull
- Security: to obtain approval for the use firearms

To remain effective the timing, frequency, duration and location of acoustic scaring devices needs to vary to reduce the risk of habituation.

Consistent with Table 1 of TasPorts' *Environment Standard – Noise*, acoustic devices including scare guns and rifles should only be used and operated between the following times:

- Monday to Thursday: 7am to 10pm
- Friday: 7am to midnight
- Saturday: 9am to midnight
- Sundays and Public Holidays: 10am to 10pm

Shooting-to-scare does not require a *Permit to Take Wildlife*, however, if the target species is native wildlife shooters should be listed as an agent under the Tasport Facility's *Permit To Take Protected Wildlife* as a precaution in the event of community concern that culling is occurring.

6.3.5. Nest and Egg destruction

Personal Protective Equipment (PPE) must be used when destroying nests and eggs to reduce exposure to bird lice and mites and reduce the potential for injury from aggressive birds. PPE should include gloves, P2 masks, disposable overalls, safety glasses and hard hats.

Breaking and crushing eggs and embryos quickly is the most practical and humane method for destroying eggs [Ref 7].

6.3.6. Euthanasia of Nestlings

Nestlings requiring euthanasia will only arise due to inadequate nest and egg destruction efforts. As a result, when native bird nestlings are destroyed an incident must be raised in TasPorts' Incident Management System (IMS) and the incident investigated.

Professional pest control contractors must be engaged to humanely euthanize nestlings. The contractor (person) must be a permitted agent against the facility's *Permit To Take Protected Wildlife*.

Guidance on suitable methods of euthanasia for nestlings is contained in Reference 7.

6.3.7. Culling

Culling is only permitted at TasPorts Facilities where the facility has a documented *Bird Management Plan* approved by the General Manager Landside Operations that demonstrates:

- culling is one element of an integrated management approach focussed primarily around preventative and deterrent controls; and
- commitment to a costed and budgeted implementation time-table to improve preventative and deterrent controls in line with best management practice, where practical and cost effective.

Culling must be undertaken by professional pest control contractors and implemented humanely in accordance with the provisions of the *Animal Welfare Act 1993*, so as to not cause unreasonable and unjustifiable pain or suffering to the animal.

Contractors must provide a *Cull Management Plan* that demonstrates how they will conduct culling humanely and in accordance with standard industry practise and measures outlined in guidance such as *The PestSmart Best Practise Management Website* [Ref 7]. *Cull Management Plans* must include the names of all contractor employees that will be involved in culling on TasPorts Facilities and details of relevant permits, licenses and training.

Shooting may only be conducted by professional shooters who have:

- obtained the necessary TasPorts security approval;
- have a permit as an agent under the facility's *Permit To Take Protected Wildlife* if the target species is a native bird; and
- have a Firearms Licence issued by Tasmania Police.

Poisons used must be approved under the *Animal Welfare Act 1993* for use with pest birds, with alpha-chloralose considered the safest and most humane poison available for controlling problem bird populations [Ref 8]. In addition, the *Agricultural and Veterinary Chemical (Control of Use) Act 1995* requires that any pest control company offering poisoning services must hold a *Commercial Operator Licence* issued by DPIPWE and any person who applies the poison must have a *Certificate of Competency* relevant to the type of work performed.

Prior to any culling commencing (with the exception of nestling destruction) the Operations Manager responsible for the TasPorts Facility must:

- obtain a *Cull Management Plan* from the pest control contractor; and
- notify and consult with the following:
 - Environmental Advisors: who will notify DPIPWE if the target species is native wildlife;
 - Corporate Affairs: for advice on a communications strategy with neighbours and to prepare for potential media enquiries; and
 - Security: to obtain approval for the use of firearms

6.4. New Infrastructure

The design of new TasPorts infrastructure must incorporate bird management features that prevent bird access and reduce its suitability for nesting, roosting and loafing.

6.5. Monitoring and Evaluation

The effectiveness of implemented bird control measures must be monitored through periodic and documented audits and inspections.

Monitoring programs must be implemented prior to any scare gun, shooting or culling activities to:

- confirm the extent of the bird problem; and
- enable an assessment of the effectiveness of control program.

Refer also to monitoring and evaluation requirements and obligations in Section 6.1 Bird Management Plan and Section 6.3.2 Permits to Take Wildlife.

6.6. Event & Action Management

All hazards or incidents arising from birds, including euthanasia of native bird nestlings, must be reported to the relevant TasPorts Operations Supervisor and logged in the TasPorts Incident Management System (IMS).

Corrective and preventative actions arising from nuisance bird hazards, incidents or monitoring programs will be tracked in the TasPorts IMS.

All complaints shall be managed in accordance with TasPorts Managing Complaints Procedure [Ref.9], including, but are not limited to the following steps:

- review activities to determine source of the complaint;
- where the source of the complaint is attributed to a TasPorts Facility, implement an improvement action; and
- implement preventative actions prior to undertaking similar activities in the future.

6.7. Accountabilities

Table 2 outlines key accountabilities for bird management at TasPorts' Facilities.

Activity	Accountable Role
Bird Management Plan	Regional Operations Manager
Budget and resourcing	Regional Operations Manager
Control implementation	Regional Operations Manager
DPIPWE <i>Permit to take Wildlife</i> – obtaining permit, compliance, record keeping and reporting	Regional Operations Manager
Culling Management Plan	Pest Control Contractor
TasPorts vessels	Marine Manager
Monitoring and evaluation	Regional Operations Manager
New Infrastructure – bird management design	Manager Projects
Research alternative control methods	Regional Operations Manager / Environmental Advisors
Verification & Audit	Environmental Advisors

Table 2: Key accountabilities for bird management

7. DEFINITIONS AND ABBREVIATIONS

Environmental Harm	Environmental harm is defined in section 5(1) of the <i>Environmental Management and Pollution Control Act 1994</i> (Tas) to mean: any adverse effect on the environment (of whatever degree or duration) and includes an environmental nuisance.
Environmental Nuisance	Environmental nuisance is defined in section 3 of the <i>Environmental Management and Pollution Control Act 1994</i> (Tas) to mean: (a) the emission, discharge, depositing or disturbance of a pollutant that unreasonably interferes with, or is likely to unreasonably interfere with, a person's enjoyment of the environment; and (b) any emission, discharge, depositing or disturbance specified in an environment protection policy to be an environmental nuisance.
TasPorts Facilities	TasPorts owned, operated or managed land, berths, vessels, navigation aids and water
General Environmental Duty	As defined in the Environment Management and Pollution Control Act 1994, a person must take such steps as are practicable or reasonable to prevent or minimise environmental harm or environmental nuisance caused, or likely to be caused, by an activity conducted by that person
Habituation	Where birds exposed to a frequently repeated stimulus realise they are not a real threat and so eventually ignore them.
Introduced birds	Birds that are not native to Tasmania and have been accidentally or deliberately introduced to Tasmania by human activity
Loafing	Birds resting
Nestlings	Bird chicks still in the nest, with open eyes and quills
Permit holder	Person identified on a <i>Permit To Take Protected Wildlife</i> issued by the Department of Primary Industry Parks Water and Environment
Roosting	Birds sleeping
Sensitive Noise receptors	Locations where people may be adversely impacted by exposure to noise. These include, but are not limited to residential areas, hospitals, schools, day care facilities and elderly housing.

“Disclaimer

The information contained in this standard is not intended as providing professional advice to any person or organisation in relation to their legal obligations concerning birds. It is your responsibility to determine, understand, implement and comply with any legal obligations. No claim is made as to the accuracy, currency or completeness of the content in this Standard.”

References

1. Bell Bay Nuisance Bird Strategy Report (TRIM DOC/19/46116)
2. Burnie Nuisance Bird Strategy Report (TRIM DOC/19/46109)
3. Devonport Nuisance Bird Strategy Report (TRIM DOC/19/46105)
4. Hobart Nuisance Bird Strategy Report (TRIM DOC/19/46100)
5. Moored Vessels Nuisance Bird Strategy Report (TRIM DOC/19/47024)
6. Navigation Aid Nuisance Bird Strategy Report (TRIM DOC/20/63)
7. The PestSmart Best Practise Management Website: Trapping of pest birds, SOP – BIR002 – Sections:
 - a. Euthanasia of trapped birds; and
 - b. Euthanasia of nestlings and destruction of eggs
8. DPIPWE Agriculture Information Sheet: Alpha-Chloralose for Bird Control
9. TasPorts Procedure – Managing Complaints (TRIM DOC/19/8306)