Wildlife (Animals)

Property management plan template

This document will facilitate the development of a property management plan for wildlife to meet the requirements of an ‘approved property management plan’.

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# Introduction

This document will assist in the development of a property management plan for wildlife.The purpose of a property management plan is to provide an accredited property management framework which accommodates primary production activities while protecting and conserving wildlife and operates as an ‘approved property management plan’[[1]](#footnote-1) as defined in the Nature Conservation (Animals) Regulation 2020.

One of the benefits to the property owner from developing a property management plan is that they can apply for a wildlife damage mitigation permit for up to three years[[2]](#footnote-2). Lethal take[[3]](#footnote-3) of wildlife under the authority of a damage mitigation permit may be allowed under a property management plan if the lethal take forms only part of a considered program to manage the impacts the wildlife is having on the viability of the property/business. A key consideration in approving lethal take of wildlife will be for the property owner to show that a reasonable effort has been made to put in place non-lethal measures and/or there is an ongoing effort to reduce or eliminate any lethal take from damage mitigation activities on the property. Any lethal take must not impact on the ecological sustainability of the species involved.

# Planning considerations

Properties don’t operate in isolation and property management planning works best when it is integrated with other aspects of property management, such as cropping, water and vegetation management planning, and with planning carried out by your neighbours or in the broader catchment. The department recommends that you discuss your planning proposal with neighbours and your local catchment group.

# How to use this template

To start building an accredited property management framework which accommodates primary production activities while protecting and conserving wildlife, you will need to do the following:

* document the existing local wildlife habitat on your property
* describe your current use of your property
* describe how wildlife impacts on this use
* describe how this use impacts on wildlife and its habitat
* research the issue to identify how widespread your issue is in your industry, and how it is being dealt with in other areas.

When developing your property management plan provide detailed and specific responses as guided by the template form. Refer to the content prompts throughout the form. Use of the template form (electronic submission) is not mandatory but is recommended.

Plans of the property and its infrastructure, descriptions and images of management techniques, and externally sourced information on relevant management techniques should be included where possible. These and other relevant details are useful when your property management plan is being assessed for approval and when communicating with other individuals and/or organisations that may be able to offer advice or learn from your planning experiences.

Remember to reference any research or documents you have used in the preparation of your plan. This helps others to know where you sourced information from which may be of use to them.

The key to preparing a successful property management plan is to focus on collecting and providing information that is practical and relevant to resolving your land use practices with the protection and conservation of wildlife.

It is recommended that your property management plan submission is developed with the assistance of the Wildlife Assessment team with the Department of Environment and Science (the department) prior to applying for a damage mitigation permit.

# Further information

Permits and Licensing – ­ [palm@des.qld.gov.au](mailto:palm@des.qld.gov.au) or 1300 130 372 option 4

Wildlife Assessments – [wildlife@des.qld.gov.au](mailto:wildlife@des.qld.gov.au)

Property management plan template

## 1. Purpose

This document relates to the management of native wildlife protected under the *Nature Conservation Act 1992*. It is intended to fulfil the requirements of an ‘approved property management plan’ as provided for in the Nature Conservation (Animals) Regulation 2020.

## 2. Objectives

**2.1 State the specific objectives of the Property Management Plan**

The purpose of this section is to systematically work through the issues you want to address on the property and how these will be addressed through your property management plan for wildlife. Setting clear objectives will allow you to identify the relationship between your land use and wildlife that you are trying to achieve. It also allows you and the department to measure the effectiveness of the plan. To help with this your objectives should be achievable and measurable.

Your objectives and actions must address a wildlife management problem that has an impact on economic viability or poses a threat to human safety or well-being.

|  |
| --- |
| State objectives |

## 3. Business details

**3.1 Please complete the following table:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Business** | Business name | | | |
| Business ownership | | | |
| Australian Business Number / Australian Company Number | | | |
| **Contact person** | | Name and position title (if the contact person is associated with a damage mitigation permit, the contact person must also be the applicant) | | | |
| Postal address | | | |
| Phone number | | Email address | |
| **Property** | | Address and/or location description | | | |
| Lot on plan | Tenure | Local government area | |
| **Business description** | | Briefly outline the operation, especially products/services produced | | | |
| **Facility and stock** | | Briefly outline the stock type if the business is a farming facility | | | |
| **Licences/permits** | | Licences/permits currently or previously held, associated with wildlife. Include licence/permit numbers | | | |
| **Department contact** | | Name and contact details | | | |
| **Consultation** | | Dialogue with stakeholders (e.g. Government, local residents, conservation groups) | | | |

## 

## 4. Property and operation description

**Provide a description of your business in terms of what you do and how you do it**.

The reason for documenting business operations is to identify where and how wildlife is impacting on economic resources and/or human safety and wellbeing on your property. This will be the starting point to help you plan how to use and develop your property in ways that address the wildlife management issues on your property.

In this section you should provide details about the current and future land use on your property (Sections 4.1 and 4.2) and on surrounding properties (Section 4.3) (surrounding land use may influence the presence or abundance of wildlife on your property and this may affect the likelihood of success of using non-lethal control measures on your property).

You will also need to identify what areas of land on your property and adjoining properties are being used by wildlife as permanent or seasonal habitat areas, roost sites, refuge areas, etc.

You may be able to adapt a property description you have already prepared for use in another property planning process.

**4.1 Current land use:**

1. Describe the activities carried out on your property:

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1. Attach a map showing the layout of infrastructure on your property (allow enough space to show areas surrounding your property that could be providing refuges or habitat for wildlife). Insert map name below for reference purposes:

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1. Outline the different stages of production and when they occur. Also indicate the susceptibility of your operations to wildlife impact changes with these stages, e.g. are they more susceptible at different seasons or times when crops are sown or ready for harvest:

| **Production stage** | **Wildlife impact description** | **Month(s)** |
| --- | --- | --- |
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**4.2 Future land use**

1. Detail any future plans you have in relation to expansion or changes to the way the property is currently used (add details to property map and include diagrams where necessary / possible):

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1. Describe how the proposed changes in land use may improve or worsen existing wildlife problems, e.g. the surrounding area could provide an alternative feeding area:

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**4.3 Surrounding land use:**

1. Describe the surrounding land use activity:

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1. Identify how the surrounding land use contributes to, or alleviates the wildlife interactions experienced by the business (e.g. could the surrounding area provide an alternative natural feeding area?):

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## 5. Wildlife and resources

Identifying the wildlife species on your property and in the surrounding area, and the expected level of impact they may have on your business, are the next stages in developing a property management plan. The first step is to get a positive identification of the wildlife species on the property. This is needed before any non-lethal control measures can be determined. Department staff can provide assistance with identifying wildlife.

It should not be assumed that because an animal’s conservation status is least concern, that its conservation in the wild is secure. An animal may be subject to a range of threatening processes that act to reduce the long term survival of that species in the wild. Therefore, while a species may be seasonally or permanently locally abundant and poses a management problem on your property, any decisions to adopt control measures need to consider its overall abundance and any threatening processes that species faces across its entire range—not just on a property by property basis.

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| **A case study: where a species in decline can still cause a management problem**  Little pied cormorants are known to take fish from aquaculture farms and damage mitigation permits have been issued in the past for both non-lethal and lethal control of these birds.  At the same time, long-term monitoring of wetland birds across eastern Australia has shown that little pied cormorant numbers have declined drastically. This has meant that the department has placed a moratorium on the lethal take of little pied cormorants until such time as the population returns to sustainable levels |

**5.1 Wildlife species of interest — please complete the following table:**

In the following table, identify regularly occurring species on the property that require management. (To add a new row, right click and select insert row below, or add additional pages if required)

| **What species do you want to manage? (include scientific name)**  Note: positive identification will be needed. | **What impact do they have? (predicted and/or experienced)**  Note: where possible include details of previously experienced economic damage. | **When is the wildlife commonly present? (seasons/time of day)** | **What is the variation in the numbers of wildlife at different times? (seasons/over a year/between years)**  **(minimum/maximum)**  Note: is abundance linked to a natural event (e.g. flowering/fruiting of trees)? | **When do the negative interactions most often occur? (seasons/time of day)** | **How long is the duration of problem behaviour? (hours/days/**  **seasons/years)** | **What are the activities of species when not involved in negative interactions?** | **Other observations** |
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**5.2 Wildlife species causing little or no impact**

It is likely that control measures targeting problematic wildlife will also have an impact on other wildlife found on the property. A damage mitigation permit authorising the use of certain control measures may only be considered if it does not adversely affect the ecological sustainability of any species of wildlife in the area. It is logical therefore to consider all wildlife species present (i.e. non-target species as well as those that are directly targeted for control).

Some non-target species may also be beneficial to your business activities. For instance, some non-target species may be predators or competitors that keep the numbers of a problem species in check.

It can also be useful to identify any ‘indicator species’ that are present on your property. These are species of wildlife that provide an indication of the quality or quantity of a particular environmental condition such as general ecosystem health, the abundance of a food source, or the availability of roosting or nesting sites that could relate to the species requiring control.

In the following table, identify any regularly occurring species found on the property, especially threatened species, or species similar to problematic wildlife, and how non-lethal control measures might impact on these species:

| **Species causing little or no impact (include scientific names)** | **Observed activities of species and approximate numbers present** | **Impact or likely impact of non-lethal control measures for species of concern on this species** |
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## 6. Wildlife management strategies

Before a permit is issued that includes new damage mitigation measures (both lethal and non-lethal), the delegated officer must be satisfied that the landholder has unsuccessfully already taken reasonable action to prevent damage or loss caused by the wildlife and that further action is now necessary to minimise economic loss or harm. It is an offence to ‘take’ wildlife without a valid permit.

The wildlife management strategies section of the property management plan outlines what mitigation measures have been used or are currently used and whether they proved successful or not, and why. It may also be useful to outline what other measures are available but not employed on the property and why. It follows that the action plan will outline what measures are to be retained and what new measures (if any) are to be trialled.

What measures are implemented and how often, and to what extent they are used will vary considerably between properties and seasons and will be affected by other external factors that reduce or increase the local populations of wildlife (e.g. availability of food on an adjoining property).

With the exception of total exclusion netting, using only one control measure will not usually result in successful control. Rotating a combination of control measures has been shown to be more effective. It is also recommended that several noise and visual deterrents are used in different combinations or sequences, so wildlife doesn’t become habituated to certain usage patterns, routines and/or deterrent types.

**Netting**

Total exclusion netting is the only method that stops birds from feeding on fruit crops and in turn reduces the potential for disease transfer from birds moving between plants. Nets may also protect against pests and hail damage. Under the Nature Conservation (Animals) Regulation 2020 (section 163), a damage mitigation permit may only be granted if the proposed way of taking an animal is humane and not likely to cause unnecessary suffering to the animal.

Netting should be:

* of a suitable mesh size and affixed in such a way as to exclude wildlife such as birds, without entangling them.
* able to withstand most storms and also able to be removed reasonably quickly when damaging weather occurs (for example in cyclone-prone areas).

**Frightening devices**

Frightening wildlife aims to stop it from moving into and settling in an area. Birds, for example, need to identify a definite threat otherwise they can easily become habituated to this approach. This is why it is recommended that several noise and visual effects deterrents are used in varying combinations to be the most effective.

Visual deterrents may include human effigies, scarecrows, bird kites (owls or birds of prey), reflective strips attached to balloons, branches, or nets, remote-controlled or model aircraft, and balloons with eye spots. Intense light (for example 2000W spotlights) can be directed towards incoming animals. Another deterrent used to frighten wildlife might be water spraying. When using frightening deterrents, wear something easily distinguishable (e.g. fluorescent vest) so birds are able to develop an association between ‘danger’ and the clothing. Dress human effigies in the same way.

Sound deterrents include automatic exploders, pyrotechnics and alarm or distress wildlife calls. Noise disturbance can be created using aerosol horns and/or metal objects that create a loud metallic noise. Birdgard (http://[www.birdgard.com.au](http://www.birdgard.com.au)) sonic deterrents can be used to create a perimeter or internal sound deterrent including a bird and bat control (BBC) module. Bird Frite® 12 gauge cartridges (<http://www.chemring.com.au>) or similar products fired from shotguns can be used to prevent bats and birds from revisiting a target area. These cartridges produce a loud noise and bright flash which can frighten flying animals without injury.

Property owners should check with their relevant council and the department to ensure actions comply with local noise restrictions/regulations.

**Partial exclusion and impediments**

Examples include:

* Wires and lines across a pond to deter wading birds or birds landing on the pond
* Perching impediments such as spikes or sharpened rods
* Pond stock refuges (e.g. removable structures that can be put inside a pond to provide places for stock to hide from predators)
* Employee or dog patrol of grounds
* Exclusion barriers that prevent animals from accessing an area.

**Additional considerations for aquaculture**

* Ensure there are no logs, rocks, or tree branches in the vicinity of the ponds where cormorants and darters can perch.

**Additional considerations for infrastructure**

* Environmental controls that may make the area less attractive to some bird species include:
* manipulating grass height to deter problem species (e.g. taller grass to deter lapwings)
* controlling rodents to assist in discouraging raptors (birds of prey)
* netting to discourage nesting and perching opportunities around buildings
* planting of species that have a low attraction for wildlife, e.g. Casuarina
* giving consideration to cooperative management of neighbouring land use, e.g. landfill.

**6.1 Past and current control measures—please complete the following table:**

| **Control measures (indicate if used currently or in the past, and if lethal or non-lethal)** | **Resources used (time used, logistical factors, frequency and economic cost where possible)** | **Describe when, how and why the control measure was effective or ineffective (indicate degree of success)** | **Ways to improve effectiveness of control measure (if possible)** |
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**6.2 Control measures considered but not implemented—please complete the following table:**

Your consideration of a range of non-lethal control measures and the analysis of their suitability for your property will support the chosen actions of your wildlife management action plan in section 7.

| **Control measures considered but not implemented** | **Reason(s) for not implementing** |
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**6.3 New control measures—please complete the following table:**

The details of new non-lethal control measures and their implementation will support your wildlife management action plan in section 7.

Note: Please discuss your response to this section with a departmental representative.

| **New control measures to be trialled** | **Implementation (including stages/timeframe)** |
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## 7. Wildlife management action plan

**The wildlife management action plan is the part of the property management plan that must be implemented by the applicant.**

To meet the conditions for a damage mitigation permit to be issued for up to three years (if required), a property management plan must be approved which outlines each non-lethal control measure to be implemented within the designated timeframe. Not adhering to the action plan may lead to a breach of the conditions of any damage mitigation permit associated with the plan. If this is the case penalties may apply. Please also note it is an offence to carry out lethal and some non-lethal wildlife control measures without a valid damage mitigation permit (note it is the damage mitigation permit that provides the lawful means to carry out the wildlife control activities not the wildlife management plan).

**7.1 Action plan**—please complete the following table or attach a separate document to address this section:

Complete the following table for species listed as species of interest (refer to section 5.1). It may be necessary to restate some of the information in sections 5 (Wildlife and resources) and 6 (Wildlife management strategies).

Note: To add a new row in the table, right click, select insert row below.

| **Wildlife management issue (species and issue), e.g. birds preying on fish** | **Non-lethal control measure** | **Implementation timeframe** |
| --- | --- | --- |

| List each problem in a new section | List each control measure in a new row | Either ‘ongoing’ or specific date(s) |
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## 8. Education strategy

It is important that staff and stakeholders have an adequate understanding of the property’s wildlife management issues in order to contribute to control measures where appropriate. You should consider what skills and knowledge you and your staff require, including:

* an understanding of the State legislation that relates to wildlife;
* wildlife identification skills (relevant field guides should be on hand);
* how to operate equipment used in frightening control measures (e.g. visual or sound deterrent devices);
* how to use specialised equipment as a result of modifying business operations;
* data recording skills and familiarity with recording and monitoring procedures (section 9).

Also, consider if there is a need for individuals who are not directly involved with the business or property to receive training or information that will assist in implementing the property management plan (e.g. neighbours whose properties provide refuge areas for wildlife).

Include details of specific activities (e.g. staff information sessions) and resources (e.g. field guidebooks) that will assist in providing factual understanding of the wildlife and any interactions requiring control.

It is the responsibility of the damage mitigation permit holder to equip staff and stakeholders with the skills and knowledge required.

| **Learning/communication strategy** | **Target audience** | **Resources required** | **Implementation timeframe** |
| --- | --- | --- | --- |
| List each strategy in a new row |  |  | Either ‘ongoing’ or specific date(s)  (may need annual refresher courses) |
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## 9. Monitoring and reporting

Wildlife monitoring, data collection and reporting must be undertaken and is the responsibility of the damage mitigation permit holder. It may be necessary to record daily observations. Monitoring should be practical and aimed at measuring an outcome. It must relate to the objectives and quantify the effectiveness of the control measures.

Only species and numbers up to the quota identified on the relevant permit can be targeted through lethal take. Accurate records of all animals taken under a permit must be recorded and provided to the licensing office on return forms. Records must be made at the end of the day/night that the animals are taken. Records of species targeted using non-lethal techniques should also be made as it is this information that will indicate the effectiveness of the action plan and chosen control measures.

Daily observations will provide the information required in section 5 (Wildlife and resources). Not only will records show where and to what extent wildlife responds to mitigation or control measures, they will also show whether there are patterns in the presence and abundance of wildlife and how this relates to environmental factors (e.g. the season, weather events, availability of other food sources). Wildlife may also respond to changes to property operation/management or infrastructure layouts and this information will assist in confirming that an action plan is effective.

Use the following table to describe:

* your procedures for monitoring and recording wildlife and their impacts on your property
* how often monitoring results will be reported to the department.

Attach the forms/tables you will use for wildlife monitoring and reporting (your department contact can provide advice on forms/tables you could use).

| **Control measure** | **Monitoring program**  **(include what species, procedures, timing/frequency)** | **Reporting procedures**  **(format and frequency of reports to the department)** |
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To add a new row, right click, select insert row below

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## 10. Evaluation and review schedule

A well planned review schedule is an essential element of a property management plan as it ensures that the mitigation/control measures being used are effective and using resources efficiently. Where control measures are not effective, decisions can be made to adapt, abandon, or replace them.

Reviews provide opportunities to identify where new control measures could potentially be introduced and to reflect on the experiences and knowledge gained from the application of measures. It also allows industry to make comparisons and changes to industry standards and practices overall.

**The property management plan that supports a damage mitigation permit is valid for up to three years but must be reviewed after each year of operation. An interim review after six months with a regional departmental representative from Wildlife Operations will also need to be scheduled.**

**10.1 Please fill out the following table as reviews are arranged and completed:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Review process** | **Review undertaken by** | **Date of review** | **Outcome (may have to refer to a separate document)** |
| Six (6) month interim review |  |  |  |
| 12 month review and evaluation |  |  |  |
| Second year review |  |  |  |
| Third year review and evaluation |  |  |  |

## 11. References and resources

**11.1 Useful resources**

* Grodecki, A., Hey, K. and Gardiner, D. (2004) *A landholder’s monitoring guide for sustainable natural resource management practice.* A paper written for the 13th International Soil Conservation Organisation Conference, Brisbane, July 2004*.*
* Morcombe, M. (2004) *Field guide to Australian birds — complete compact edition.* Steve Parish Publishing Pty Ltd, Archerfield, Queensland.
* Porter, J.L., Kingsford, R.T. and Hunter, S.J. (2006). *Aerial surveys of wetland birds in eastern Australia — October 2003–2005.* Department of Environment and Conservation, NSW. Occasional Paper No. 37.
* Temby, I. (2005) *Wild Neighbours.* The Humane Approach to Living with Wildlife. Citrus Press.

Please add more resources as you see fit.

**11.2 List the references used to develop the property management plan in the following table:**

Note: You may copy the format for writing references used in section 11.1.

**References**

* Notes: Write references next to these dot points. This is a free text field. Delete this text as required.

**11.3 Department resources**

The departments website and provides a single-point location for accessing all documents relating to licences and permits at www.des.qld.gov.au

Refer to departments’ website for links to the following.

* Damage mitigation permits
* Information sheet – Assistance for landholders: managing macropods to minimise property damage

1. An approved property management plan, for land, means a plan that—

   is about the management of the land; and

   provides for the conservation of wildlife on the land; and

   is approved by the chief executive. [↑](#footnote-ref-1)
2. In some situations, it is necessary to take wildlife (lethally and/or non-lethally) to minimise damage to property (e.g. crops) or protect human health. A damage mitigation permit allows a person to take wildlife in such circumstances. [↑](#footnote-ref-2)
3. **take**in relation to an animal includes – hunt, shoot, wound, kill, skin, poison, net, snare, spear, trap, catch, dredge for, bring ashore or aboard a boat, pursue, lure, injure or harm the animal. [↑](#footnote-ref-3)