

Assessment Guideline

Queensland Parks and Wildlife Service and Partnerships

Ecologically sustainable lethal take of flying-foxes for crop protection

Purpose

This assessment guideline outlines the Department of Environment and Science's (the department's) approach to determining whether a commercial crop grower will be issued a Damage Mitigation Permit (a permit) for the lethal take of flying-foxes with reference to specific provisions of the *Nature Conservation (Animals) Regulation 2020* (the Animals Regulation) and the *Code of Practice —Ecologically sustainable lethal take of flying-foxes for crop protection* (the code).

Background

The Queensland Government provides, in certain circumstances, for permits to be issued for the lethal take of flying-foxes for the purposes of crop protection. The Government is committed to both protecting Queensland's native fauna, including flying-foxes, working with landholders to ensure agricultural productivity is not adversely affected by flying-foxes, and ensuring sound practices in relation to animal welfare.

Guideline statement

A commercial crop grower may be issued a permit for the lethal take of flying-foxes only where the chief executive or their delegate (collectively referred to in this document as the delegate) is satisfied of each of the criteria under section 164 of the Animals Regulation, including that action under the permit would not affect the sustainability of flying-foxes in the wild, that the applicant is taking all actions required under the code to prevent or minimise the damage, and that the applicant will take and deal with any taken flying-foxes in accordance with the code.

Conservation and quotas

Statutory requirements

Nature Conservation (Animals) Regulation 2020

Section 164(2)(e) only if the chief executive is satisfied an 'action under the permit will not adversely affect the survival of the species of flying-fox in the wild';

Section 164(3)(a) and (b) the chief executive cannot grant a damage mitigation permit if 'the permit would authorize the taking a flying-fox of a particular species in a particular financial year; and the total permit number for the species for the financial year has reached the maximum permit number for the species.'

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Code of Practice

To meet the requirements of section 164(2)(e) and 164(3)(a) and (b) of the Animals Regulation, the chief executive must not authorise the lethal take of a particular species of flying-fox in numbers greater than the annual Queensland quotas specified in Table 1 of the code:

Table 1: Annual Queensland quotas for the lethal take of flying-foxes

Species	Annual Queensland quotas (numbers of animals per financial year)
<i>P. scapulatus</i> (little red flying-fox)	4000
<i>P. alecto</i> (black flying-fox)	3500
<i>P. poliocephalus</i> (grey-headed flying-fox)	1280

Procedure

The annual Queensland quota is the primary consideration, however, to ensure equitable access to permits the chief executive may limit each permit in accordance with the maximum number per month specified in Table 2.

Table 2: Maximum numbers per month under an individual permit

Species	Maximum numbers per month
<i>P. scapulatus</i> (little red flying-fox)	30
<i>P. alecto</i> (black flying-fox)	30
<i>P. poliocephalus</i> (grey-headed flying-fox)	20

As a general rule permits should be issued for a 3-month period. The delegate may exercise discretion should circumstances require a longer or shorter permit period. By way of example, a 3 month permit may authorise up to 90 black flying-foxes, 90 little red flying-foxes and 60 grey-headed flying-foxes.

The permitted numbers of flying-foxes may be taken at any time within the term of the permit, at the permit holder's discretion. Subsequent permits may only be issued for that property where the annual Queensland quotas allow, where all returns of operations for that property have been provided to the department and at the discretion of the chief executive. In the circumstance where a permit was issued for less than the maximum numbers per month, and the need arises, a permit holder may seek to have their permitted numbers increased by the chief executive, up to the maximum numbers per month.

A permit may only be issued in relation to a particular property and for each property, only one permit may be in force at any time.

In the period 1 September to 1 March in ordinary circumstances a maximum of 70% of the annual quota for each species may be issued (2800 for little red flying-foxes, 2450 for black flying-foxes and 896 for grey-headed flying-foxes). At 1 March, the total remaining annual quota is available for allocation in the period 1 March to 30 June.

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When allocating numbers to an individual permit, the chief executive should take note of the flying-fox distribution maps (Appendix 1) and not issue a permit to shoot a species that is not in the area applied for. For example: if the property is located to the north of Ingham, a permit should be issued for little red flying-foxes and black flying-foxes, up to the numbers stated in Table 2, i.e. maximum 30 black flying-fox and maximum 30 little red flying-fox per month, but should not include grey-headed flying-foxes.

Commercial grower

Statutory requirements

Nature Conservation (Animals) Regulation 2020

Section 164(2)(d) only if the chief executive is satisfied 'the landholder is a commercial crop grower for the land'.

Procedure:

Consider whether the applicant has—

- a) provided an ABN / ACN, or title and section of legislation under which business/corporation/etc. has legal status; and
- b) declared that they are a commercial grower.

Potential for damage and significant economic loss

Statutory requirements

Nature Conservation (Animals) Regulation 2020

Section 164(2)(a) only if the chief executive is satisfied 'the flying-fox is causing, or may cause, damage to crops', and section 164(2)(c) 'the landholder may suffer significant economic loss of the kind stated in the flying-fox damage mitigation code if the damage is not prevented or controlled'.

Code of practice

Significant economic loss is defined as any loss that may impact on the commercial viability of the crop for the grower.

Procedure:

Due to the large geographic range of flying-foxes, and the known susceptibility of fruit to predation by flying-foxes, where the applicant is growing a fruit crop it will usually be reasonable to assume that flying-foxes may cause damage to the crop and that the applicant may suffer significant economic loss, unless there are specific circumstances which suggest otherwise.

Where the applicant is growing a crop other than fruit, consider whether the applicant has provided sufficient information to demonstrate that they may suffer damage to crops or significant economic loss. For example:

- a) photographs showing flying-fox damage to crops/trees/plants, such as, tooth marks, spats, broken leaders (new season's shoots), or other signs of damage;
- b) information regarding damage to another crop of the same type located within 5 km of their crop; or
- c) any other information regarding the likelihood of damage to crops or significant economic loss.

Non-lethal deterrence methods

Statutory requirements

Nature Conservation (Animals) Regulation 2020

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Section 164(2)(b) only if the chief executive is satisfied ‘the landholder of the land on which the flying-fox is causing, or may cause, damage has made a reasonable attempt to take any action the flying-fox damage mitigation code states the landholder must take to prevent or control the damage’.

Code of practice

To meet the requirements of section 164(2)(b) of the Wildlife Management Regulation, the chief executive must be satisfied that the applicant has made a reasonable attempt to implement the non-lethal deterrence methods detailed in the code, or the applicant has demonstrated why they cannot reasonably implement the non-lethal deterrence methods.

Procedure

Consider the non-lethal deterrence methods the applicant is using, and whether these methods meet the requirements of schedule 1 of the code. Supporting information provided by the applicant to establish that these methods are in place may include receipts for nets/equipment or photographs showing nets/equipment in use, or the applicant may provide information as to why nets/equipment cannot be used. Photos and/or receipts, once provided, may be considered relevant for subsequent applications for up to 3 years.

Where a permit is granted, the delegate should, as a general rule, include a permit condition that requires a permit holder to continue using the non-lethal deterrence methods for the duration of the permit. For example:

“The permit holder must ensure that the *non-lethal deterrence methods* outlined in the *Code of Practice—Ecologically sustainable lethal take of flying-foxes for crop protection* and specified in your permit application are used and maintained in accordance with the code at all times that this permit is in operation”.

Examples of methods that may be considered as meeting the requirements of the code include:

- Drape netting, properly installed, and covering 25% or more of the crop, plus loud sounds being projected across the entire crop whenever flying-foxes approach, or whenever they are likely to approach;
- Exclusion netting, properly installed, and covering 10% or more of the crop, plus an array of bright lights covering the remaining area of the crop;
- An array of foggers or controlled fires producing smoke across the entire crop, plus an array of devices or equipment producing movement across the entire crop.
- Exclusion or tunnel netting covering the entire crop.

See schedule 1 of the code for full details of non-lethal deterrence options.

Example of how an applicant may demonstrate that they cannot reasonably implement the non-lethal deterrence methods:

- Provide information/documents to substantiate that it is not reasonable to use exclusion netting, and, information/documents to substantiate that it is not reasonable to use any combination of the other methods.

Taking and dealing with taken flying-foxes

Statutory requirements

Nature Conservation (Animals) Regulation 2020

Section 164(2)(f) only if the chief executive is satisfied ‘the proposed way of taking the flying-fox complies with the flying-fox damage mitigation code’.

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Section 164(2)(g) only if the chief executive is satisfied ‘the proposed way of dealing with the flying-fox after the flying-fox has been taken complies with the flying-fox damage mitigation code’.

Code of practice

To meet the requirements of section 164(2)(f) and (g) of the Animals Regulation, the chief executive must be satisfied that the proposed way of taking and dealing with a taken flying-fox is the method of taking and dealing with a taken flying-fox detailed in the code.

Procedure

Consider whether the applicant has declared that they have read and understood their legal obligations under the code and agreed to adhere to these obligations. (i.e. ‘ticked’ the relevant declaration on the permit application form).

Other considerations

Statutory requirements

Nature Conservation (Animals) Regulation 2020

Section 241(1): The chief executive must consider each of the following—

- a. whether the chief executive is restricted from granting the authority under Chapter 4, Parts 3 to 18;
- b. whether the applicant is a suitable person to hold the authority;
- c. the impact the activities proposed to be carried out under the authority may have on the conservation of native wildlife;
- d. the effect the grant of the authority may have on the fair and equitable access to nature, in particular, the ecologically sustainable use of wildlife;
- e. any contribution the applicant proposes to make to the conservation of nature;
- f. any relevant Australian or international code, instrument, protocol or standard or any relevant intergovernmental agreement;
- g. the precautionary principle;
- h. public health and safety;
- i. the public interest;
- j. any recovery plan for an animal to which the authority is proposed to apply;
- k. for an animal authority, other than a renewable licence, proposed to commence immediately after an existing animal authority of the same type expires—
 - (i) whether the existing animal authority was obtained on the basis of false or misleading information; and
 - (ii) whether the holder of the existing animal authority, or a relevant person for the holder, has failed to comply with a condition of the existing animal authority;
- l. any other matter stated in a conservation plan as a matter the chief executive must have regard to when considering an application for the authority.

Section 241(2) ‘the chief executive may have regard to anything else the chief executive considers appropriate to achieve the object of the Act’.

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Procedure:

If satisfied of the considerations under the Animals Regulation, the chief executive must exercise his/her discretion and decide whether to issue a permit after taking into account the matters in section 241 of the Animals Regulation above, including:

- the impact the permit activities may have on conservation of the flying-foxes in the wild
- public health and safety;
- the public interest;
- anything else which is relevant and appropriate to achieve the object of the Act.

Monitoring and compliance considerations

- Permit holders are required under the Animals Regulation to submit returns within 10 working days after each 3 month period that the permit is in force, and within 10 working days of the permit ceasing to have effect. Blank 'Return of operations' forms (returns) can be supplied to permit holders when a permit is issued and can also be obtained from the department's website.
- In accordance with the powers outlined in section 145 of the Act, site inspections by DES may be undertaken:
 - with landholder consent, or
 - with a warrant.
- The permit application requests the applicant's consent for property access. This refers to section 145(2)(a) of the Act. Even where consent is provided on the permit application form, DES will, where possible, reaffirm consent at the time of property entry. Where the applicant is not the occupier, any consent given on the permit application is not sufficient for the purposes of section 145(2)(a).
- Where occupier consent is not provided, general powers of entry and search under section 145(b) of the Act (i.e. under authority of a warrant) continue to apply and officers of the Queensland Government may use these powers on a case by case basis.
- Where a permit is already in operation, officers conducting site inspections should consider how the actions are being undertaken, and whether the actions are in accordance with the permit conditions and the code of practice.

Definitions

code and **code of practice** and **flying-fox damage mitigation code** means the *Code of Practice — Ecologically sustainable lethal take of flying-foxes for crop protection*

exclusion netting means—full canopy netting or tunnel netting, and for fruit such as bananas, protective fruit bags.

fruit means—the edible part of a plant developed from a flower, with any accessory tissues, such as low-chill stone fruits, lychees, longans, rambutans, persimmons, bananas, pawpaws, mangoes and citrus.

permit means— a damage mitigation permit under the *Nature Conservation (Wildlife Management) Regulation 2006*.

precautionary principle means the principle that, if there are threats of serious or irreversible environmental damage, lack of full scientific certainty must not be used as a reason for postponing measures to prevent threatening processes.

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Authorities

Code of Practice —Ecologically sustainable lethal take of flying-foxes for crop protection

Nature Conservation Act 1992

Nature Conservation (Animals) Regulation 2020

Return of Operations Damage mitigation permit (lethal take of flying-foxes for crop protection)

Approved By

Kirstin Kenyon

10.9.2020



Signature

Date

Executive Director, Wildlife and Threatened
Species Operations,
Department of Environment and Science

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Human Rights Compatibility

The Department of Environment and Science is committed to respecting, protecting and promoting human rights. Under the [Human Rights Act 2019](#), the department has an obligation to act and make decisions in a way that is compatible with human rights and, when making a decision, to give proper consideration to human rights. When acting or making a decision under this code of practice, officers must comply with that obligation (refer to [Comply with Human Rights Act](#)).

Disclaimer

While this document has been prepared with care, it contains general information and does not profess to offer legal, professional or commercial advice. The Queensland Government accepts no liability for any external decisions or actions taken on the basis of this document. Persons external to the Department of Environment and Science should satisfy themselves independently and by consulting their own professional advisers before embarking on any proposed course of action.

Appendix 1: Flying-fox distribution maps



Figure 1. Little red flying-fox

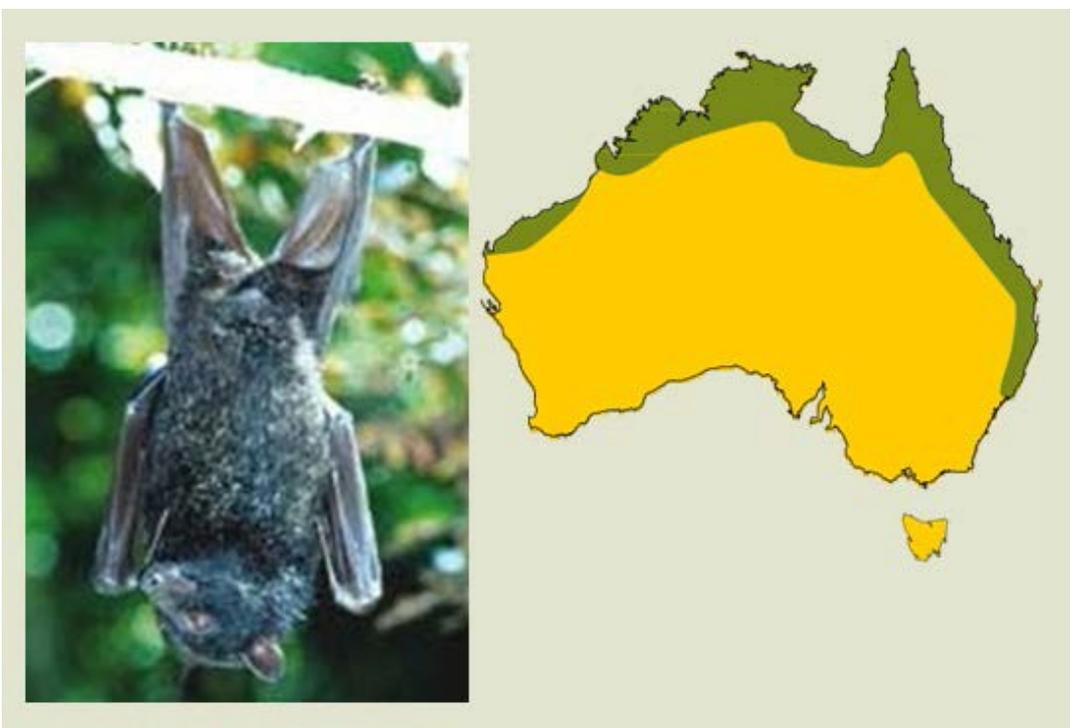


Figure 2. Black flying-fox

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Figure 3. Grey-headed flying-fox



Figure 4. Spectacled flying-fox

Note: Although the spectacled flying-fox occurs in Queensland, due to its listing as a threatened species under the *Nature Conservation Act 1992*, a damage mitigation permit cannot be granted for its lethal take unless specifically authorised under a conservation plan.