



If the person completing this form is representing a small business (i.e. a business having less than 20 employees), please provide an estimate of the time taken to complete this form.

Please include:

- the time taken spent reading the instructions, working on the questions and obtaining the information; and
- the time spent by all employees in collecting and providing this information.

Hours

Minutes

# Supplementary Form A — Whales and Dolphins (cetaceans)

Application under section 238 of the Environment Protection and Biodiversity Conservation Act 1999.

## This form has two purposes:

1. To apply for a permit to undertake an action which will contribute significantly to the conservation of whales and dolphins such as research on whales and dolphins.
2. To apply for a permit to interfere with whales and dolphins, where that interference is incidental to and not the purpose of the action, for example, building an underwater structure where you may come into contact with whales or dolphins.

Please supply the information requested in this form if you will interfere with, injure, take, keep, move, possess or treat (cut up/divide) a cetacean or part of a cetacean in the Australian Whale Sanctuary or waters beyond the Australian Whale Sanctuary (overseas).

This form should be completed in conjunction with The General Permit Application form.

## If you need more space

If there is insufficient space on this form to fully address any of the questions please attach additional pages and list these attachments at question 16.

When using additional documentation to answer individual questions in this application, please refer to the document title, the specific section(s) and the page number(s) on which the information appears.

## Application fee

There is a \$25 fee for permits where the action will contribute significantly to the conservation of cetaceans. There are some fee exemptions in certain circumstances, details of which can be obtained from the Department at the below address.

## Where to send the forms and the application fee

Please send the completed General Permit Application **and this form** and any accompanying attachments to:

Director  
Migratory Species Section  
Department of Agriculture, Water and the Environment  
GPO Box 787  
CANBERRA ACT 2601

If you wish to carry out activities within the Great Barrier Reef Marine Park, you may need to apply to the Great Barrier Reef Marine Park Authority for a permit. For information please follow this link: [Great Barrier Reef Marine Park Authority permits](#)

If your activity will be undertaken in an Australian Marine Park then you may need to apply to the Director of National Parks for an authorisation. For more information please follow the link below:

<https://onlineservices.environment.gov.au/parks/australian-marine-parks>

If you are proposing to send specimens out of Australia you will need an export permit. Import permits will be necessary for bringing parts or products of cetaceans into Australia. For more information on imports and <http://www.environment.gov.au/biodiversity/wildlife-trade/permits#need>



**1** Details of species that will be affected by the action. Use the following codes to enter details in columns 3 and 5.

<b>Column 1</b> Common name of species. Common and scientific names are available at the Departmental website: <a href="http://www.environment.gov.au/erin/applications/biodiversity/sprat/">http://www.environment.gov.au/erin/ applications/biodiversity/sprat/</a>	<b>Column 2</b> Scientific name of species	<b>Column 3</b> Conservation status of threatened species under EPBC Act (e.g. the blue whale is endangered EN)  <b>Codes for Column 3</b> EW Extinct in the wild EX Extinct CE Critically endangered EN Endangered VU Vulnerable CD Conservation dependent	<b>Column 4</b> Estimated number that will be affected.	<b>Column 5</b> Type of effect  <b>Codes for Column 5</b> IC Interfering with a cetacean IN Injuring TA Taking KE Keeping MO Moving TC Treating PO Possessing
Sei Whales	<i>Balaenoptera borealis</i>	VU	5	IC
Omura Whales	<i>Balaenoptera omurai</i>	Not listed	5	IC
Bryde's Whales	<i>Balaenoptera brydei</i>	Cetacean	5	IC

**2** Provide the latitude and longitude of where the action will be conducted. Latitude and longitude references should be used instead of AMG and/or digital coordinates.

Where the project area is less than 1 square km, provide a single pair of latitude and longitude references.

Where the project area is greater than 1 square km or any dimension is greater than 1 km, attach a list of coordinates to enable accurate identification of the location of the project area.

Latitude

Degrees Minutes Seconds

28	21	54.6
28	15	49.4
30	18	37.8
30	19	48.2

Longitude

Degrees Minutes Seconds

153	34	42
153	52	19.6
153	08	59.9
153	28	11.3

Locality name or description

NSW Northern Rivers from Coffs Harbour to Hastings Point

**3** **Attach an A4 sized map to show the boundaries of the area in which the action will be conducted.**

**4** Provide an attachment describing the action addressing the following points.

- The equipment and methods used to comply with the EPBC Act Regulations.
- What steps will be taken to minimise impacts on cetaceans.
- The objectives and purposes of the action.



- 5 Attach a description of any research relevant to the affected species or community that will be carried out in the course of or in conjunction with the proposed action, including:
- A. A copy of the research proposal.
  - B. The names of the researchers and institutions involved in or supporting the research.
  - C. Relationship of the researchers to the permit applicant, including any funding being provided by, or to, the permit applicant
- 6 Will the action involve invasive techniques?
- No ☐ ⇒ **Go to next question**
- Yes ☒ ⇒ Attach application and approval from an Animal Ethics Committee.
- 7 Are you applying on the basis that the action will contribute significantly to conservation of cetaceans? (**Please note**, a fee of \$25 is required for this type of permit — see Question 21)
- No ☐ ⇒ **Go to 9**
- Yes ☒ ⇒ **Go to next question**

- 8 Why do you believe that the action will contribute significantly to the conservation of cetaceans?

The large majority of the studies conducted on baleen whales in Australian waters are focused on humpback whales, being the most abundant species occurring in Australian waters. However several other less known species use Australian waters for their migration. The Bryde's whale (*Balaenoptera edeni*) is one of the most poorly understood baleen whale species as result it remains classified under the IUCN Red List as data deficient species. Bryde's whales are also known as 'tropical whales', due to their preference for waters of 16° Celsius or higher, they are found in both nearshore and open waters between the latitudes of 40° South and 40° North. Bryde's whales can be easily confused with Sei whales (*Balaenoptera borealis*), which are larger and have a more temperate and sub-polar distribution, and Omura's whale (*Balaenoptera omurai*), which was only described in 2003, and can overlap in range with both Bryde's whale and Sei whale leading to uncertainty about their true distribution and conservation status. Further confusion is caused by uncertainty about the possible existence of two species of Bryde's whales, which have provisionally been classified as two sub-species with partially overlapping ranges: the smaller Eden's whale (*Balaenoptera edeni edeni*), and the larger Bryde's whale (*B. e. brydei*). The collection of satellite data will allow to better understand the occurrence and migration pattern of these mysterious species along the eastern Australian coast and will provide fundamental information for their conservation status.

**Now go to 13**



9 Are you applying on the basis that the effect on cetaceans will be incidental to, and not the purpose of, the action?

**You must also answer questions 10, 11 & 12 to apply for this type of permit.**

No ☐ ⇒ You are not able to apply for a permit using this form, please contact the Migratory Species Section at [EPBC.Permits@environment.gov.au](mailto:EPBC.Permits@environment.gov.au), or call (02) 6274 1111.

Yes ☒ ⇒ Why do you believe that the impact of the action will be incidental to and not the purpose of the action?

During remote satellite tagging whales are subjected to minor procedures which do not require anaesthesia or analgesia, although some short-term distress may occur. Tagging does not affect reproductive success or the behaviour of individuals during and immediately after tagging. Individuals most often show no reaction to tagging. In the majority of the cases tagging causes only a slight reaction such as a slight flinch, slight shake, short acceleration, or immediate dive. Severe immediate reactions are rarely observed. Overall there are no significant mid- or long-term changes in the behaviour and survival of whales following biopsy sampling or tagging.



- 10** Why do you believe that the proposed action will not adversely affect the conservation status of a species of cetacean or population of that species?

In this study we will use LIMPET tags (Low Impact Minimally Percutaneous Electronic Transmitter), a satellite transmitting tag widely used for cetacean tracking. LIMPET tags have been used on about 20 species of cetaceans including Blue and Humpback whales in Australia. The LIMPET tag is the less invasive tagging system with the least likelihood for adverse impact on the target whale, but can still provide one month of tracking data. LIMPET tags attachment are made of two rows of three, backward facing petals (six petals total) that act as anchors. The darts do not penetrate past the blubber layer and the tag is prevented from penetrating deeper than the length of the darts (6.8 cm) by the tag itself. The tags small size allows for deployment high on the dorsal fin to enable frequent transmissions to the Argos satellites. LIMPET tags are designed to be deployed using Dan-Inject CO2 rifles from a distance ranging from 5 to 25 m from the individuals. More information on LIMPET tag can be found at the following links:

- 1) <https://static.wildlifecomputers.com/LIMPET-Deployment-Accessory-Options-12.pdf>
- 2) <https://static.wildlifecomputers.com/LIMPET-Suite-Product-Sheet2.pdf>
- 3) <https://static.wildlifecomputers.com/2019/06/06/155039/LIMPET-Tag-Suite.pdf>

Overall LIMPET tags don't have a significant impact on the survival of the tagged individual. A followed-up analysis on various tagged whales found swelling occurred in 74% of re-encountered gray whales. Swellings on common in blue whales was rare with current models.

Depressions occurred in 82% of gray and 71% of blue whales (Norman et al. 2017). A recent study on immediate reactions and long-term responses reported not severe immediate reactions to tagging. Hit or miss and age-sex class were important predictors of the reaction, but the method was unimportant. Overall, there were no significant mid- or long-term changes in the occurrence of whales in the study area following tagging. No major effect has been also reported on the reproductive success and survival (Best and Mate 2007).

Only adult individual will be targeted in this study

- 11** Describe how the proposed action will be consistent with any *recovery plans* or *wildlife conservation plans* in force for the species of cetaceans that may be affected by the action.

*Commonwealth recovery and wildlife conservation plans that are in force are available from the Department of Agriculture, Water and the Environment web site:*

<http://www.environment.gov.au/cgi-bin/sprat/public/publicshowallrps.pl>

*State and territory recovery plans will be available from state and territory environmental agencies.*

The large majority of the studies conducted on baleen whales in Australian waters are focused on humpback whales, being the most abundant species occurring in Australian waters. However, several other less known species use Australian waters for their migration. The Bryde's whale (*Balaenoptera edeni*) is one of the most poorly understood baleen whale species as result it remains classified under the IUCN Red List as data deficient species.

Bryde's whales are also known as 'tropical whales', due to their preference for waters of 16° Celsius or higher, they are found in both nearshore and open waters between the latitudes of 40° South and 40° North. Bryde's whales can be easily confused with Sei whales (*Balaenoptera borealis*), which are larger and have a more temperate and sub-polar distribution, and Omura's whale (*Balaenoptera omurai*), which was only described in 2003, and can overlap in range with both Bryde's whale and Sei whale leading to uncertainty about their true distribution and conservation status. Further confusion is caused by uncertainty about the possible existence of two species of Bryde's whales, which have provisionally been classified as two sub-species with partially overlapping ranges: the smaller Eden's whale (*Balaenoptera edeni edeni*), and the larger Bryde's whale (*B. e. brydei*).


The collection of satellite data will allow to better understand the occurrence and migration pattern of these mysterious species along the eastern Australian coast and will provide fundamental information for their conservation status.



- 12 The applicant is required to take all reasonable steps to minimise interference with cetaceans.

How will this be carried out?

As part of the procedures described previously each individual sampled will be monitored for ten minutes to assess the presence of any abnormal behaviour. The whale response to tagging will be recorded using a grade system varying from 0 (no impact) to 5 (strong reaction). Photograph of the tagging location will also be collected to visualise the area the area of impact and the presence of potential wound. All attempts and actual tag deployments are filmed and reviewed post-deployment.

- 13 Attach details of any proceedings against the proposed permit holder under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources. 

#### 14 Fees

The following fees apply:

- If you answered **yes** at question 7, for an action which will contribute significantly to the conservation of cetaceans - \$25 (there are fee exemptions in some circumstances).
- An incidental action relating to cetaceans - nil

- 15 Are you paying by credit card?

No ☐ ⇒ **Attach a cheque, go to next question**

Yes ☐ ⇒ Complete the following details

Card: Visa ☐ Bankcard ☐ MasterCard ☐

Card number

Expiry date (month/year)

Card holder's name as shown on card

Amount

Cardholder's signature

#### 16 Attachments

Indicate below which documents are attached.

- Attach a map. **See question 3** ☒
- The equipment and methods used to comply with the EPBC Act Regulations. **See question 4** ☒
- What steps will be taken to minimise impacts on cetaceans. **See question 4** ☒
- The objectives and purposes of the action. **See question 4** ☒
- Copy of research proposal. **See question 5** ☐
- Names of researchers and institutions. **See question 5** ☐
- Relationship of researcher to permit applicant. **See question 5** ☐
- Ethics committee approval. **See question 6** ☒
- Details of any proceedings against the permit holder under a Commonwealth, State or Territory law. **See question 13** ☐
- Cheque for payment of fee. **See question 14** ☒
- List all additional documents below** ☒

Titles of all attached documents (*include the document title, the specific section(s) and the page number(s) on which the information appears*)

Department of Planning Industry and  
Environment Scientific Licence SL102552

NSW Department of primary industry  
MEAA21/193



## 17 Declaration

I declare that the information contained in this application is correct to the best of my knowledge.

Signature of applicant

Name of person signing

Daniele Cagnazzi

Date

10/03/2022