

Sei Whale

An endangered and enigmatic
Falkland Island species



www.falklandsconservation.com

Sei whales in the Falkland Islands

The sei (pronounced “say”) whale is a large baleen whale species that is currently classified as globally endangered following heavy exploitation in the 1900s. This leaflet provides information on their occurrence and ecology in the Falklands, and advice for spotting and identifying them at sea.

Whales in the Falklands

Since the 1990s, local people have reported a large increase in the occurrence of whales inshore around the Falkland Islands, the majority being identified as sei whales. This makes the Falklands special in being one of very few localities worldwide where sei whales are regularly observed in coastal waters.

Most sightings are reported between January and May, during the austral summer and autumn seasons. The whales occur throughout the islands, both offshore and nearshore in waters as shallow as 15 m depth. They can be seen within semi-enclosed bays, sounds and inlets in addition to open coastal waters.

Migration

Although their movements are poorly-studied, sei whales appear to migrate seasonally between warm sub-tropical wintering areas used for mating and calving, and cooler higher-latitude feeding grounds in the summer.



Sei whale surfacing in Berkeley Sound

The Falkland Islands comprise a summer feeding area for Southern Hemisphere sei whales, but it is currently unknown where the same animals travel to for the winter.

Group size and behaviour

In the Falkland Islands sei whales are most often seen singly or in small groups of 2 to 5 animals. Occasionally, numerous animals form loose aggregations in areas rich in food.

Typical surfacing behaviour comprises a blow and slow roll of the back. Sei whales have been recorded on dives of over 13 min duration in Falkland waters. The whales typically take 3 or 4 breaths at the surface (at approximately 30 sec intervals) between longer duration dives.

Feeding and diet

Sei whales feed both by “skimming” and “gulping.” While skimming, they swim close to the surface and strain food through the fine sieve of bristles on the baleen plates in their mouth. Gulping usually involves rolling onto their side to take a large mouthful of food by actively lunging through a prey concentration. Their diet mostly comprises swarming crustaceans such as copepods and krill, but also includes fish and squid. Studies in Berkeley Sound in East Falkland indicated that sei whale diet in that area was dominated by lobster krill.



Sei whale gulping lobster krill at the surface

Photo-identification

What is photo-identification?

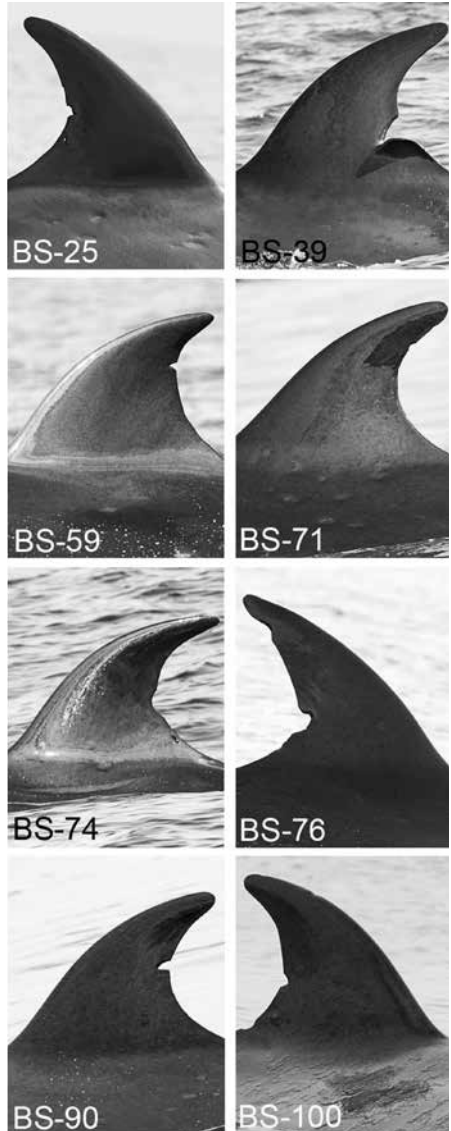
Photo-identification is a method of monitoring individual whales and dolphins using high-resolution camera equipment. The method relies on natural markings on the body, tail flukes or dorsal fin of the animals, which are used to uniquely-identify and catalogue individuals. Photographic re-captures over time provide information on population size, and on the movements, social affiliations and life history of particular individuals.

Identifying sei whales

Although less well-marked than some other whale species, sei whales have several types of natural marking that can be used to recognise individuals. This includes nicks along the edges of the dorsal fin, holes through the fin produced by parasites, the pale oval scar patterns caused by cookie-cutter shark bites, scarring of other origin (for example killer whale tooth rakes) and subtle variations in the pigmentation pattern.

How can you help?

Falklands Conservation maintains a catalogue of distinctive sei whales photographed in the Falkland Islands, and submissions are welcome from anyone who has suitable images. The most useful images are those with good focus and lighting, where the whale is situated side-on to the photographer, and where the dorsal fin is a good size within the frame. When possible, it is useful to photograph both sides of an individual. In general the use of a DSLR camera with a fast shutter speed (at least 1/500) and suitable ISO (usually at least 400) is required. Additional useful information includes the date, estimated group size and a general location of the sighting (e.g. "Berkeley Sound"). Images can be sent to: whales@conservation.org.fk

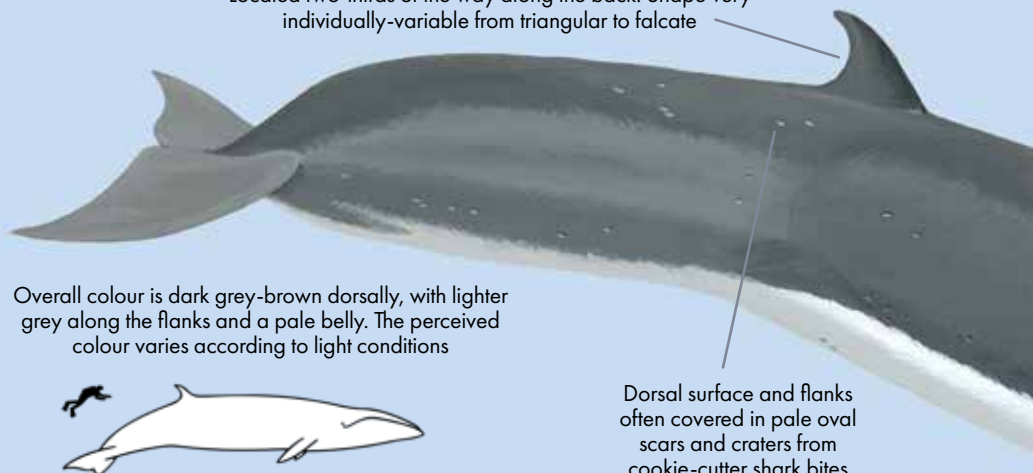


The dorsal fins of some of the most recognisable sei whales photographed during a 2017 study in Berkeley Sound. These animals all have nicks in the dorsal fin edges and some also have distinctive scarring.

Features of a sei whale

Until the initiation of recent field studies, sei whales received little research focus worldwide due to both their elusive behaviour and their preference for offshore habitat that made them difficult to access. Scientists are now slowly unravelling the mysteries of this enigmatic whale species, including the subtleties of their colour pattern which has been poorly-described to date due to the lack of photographs of live animals. Some of the key features to look out for to identify a sei whale are described here.

Tall, upright dorsal fin rising at a steep angle from the back. Located two-thirds of the way along the back. Shape very individually-variable from triangular to falcate



Overall colour is dark grey-brown dorsally, with lighter grey along the flanks and a pale belly. The perceived colour varies according to light conditions

Dorsal surface and flanks often covered in pale oval scars and craters from cookie-cutter shark bites

Large 15 m body size. Sei whales are the third-longest species of whale in the world

Confusion species in the Falkland Islands

Sei whales have a similar shape and appearance to several other large whale species. In the Falklands, confusion is most likely with the **fin whale** and the **minke whales**.

MINKE WHALES are much smaller in size and usually lack the conspicuous blow of sei whales.

FIN WHALE: When distinguishing between fin and sei whales, careful attention should be paid to the shape of the dorsal fin and the pigmentation

(jaw and chevron) pattern. The dorsal fin of a sei whale is very upright and set at an angle of 46° from the back, while that of the fin whale is sloped backwards and set at an angle of around 33° from the back. Both sei and fin whales have a chevron; however, that of the fin whale is markedly more extensive on the right side of the head than the left side. Fin whales also have a distinctly white right-side lower jaw and a dark left-side lower jaw, whereas any asymmetry in colouration in sei whales is usually much less marked (although the lower jaw colour varies from pale grey to dark depending on individual).

Sei whale statistics

Length:	Adult average = 15 m (max. 19.5 m); newborn = 4.5 m
Adult weight:	Average of 19 tons
Sexual maturity:	Average of 8 to 11 years old and 13–14 m length
Mating:	Peaks during June and July in the Southern Hemisphere
Gestation:	11.5 months in the Southern Hemisphere
Lactation:	6 to 7 months duration. Calf is 9 m long when weaned
Calving:	Single calf born every 2 to 3 years
Longevity:	>70 years



Pale, forward-sweeping
"brush mark" pattern
on flank

A pale-grey forward-pointing
V-shaped "chevron" extends
from each lower flank forward
onto the back, with both sides
meeting behind the head.
The chevron varies between
individuals in complexity and
intensity, and according to light

33 to 65 ventral
pleats that end
ahead of the navel

Pointed head with
a single head ridge
down the centre.
Jaw line slightly
arched and
downturned at
the tip

Lower jaw
colour varies in
appearance from
dark to pale grey
in colour



Which whale?

At least 25 species of whale, dolphin and porpoise (known collectively as “cetaceans”) have been recorded in the Falklands. Most inhabit deeper water areas and are unlikely to be seen from shore. However, in addition to sei whales, both the southern right whale and minke whales can be observed around the Falklands coast. Other whales, including humpback whales and fin whales, may occasionally be seen. Killer whales are regularly observed in certain areas, especially around Sea Lion Island. Peale’s and Commerson’s dolphins inhabit nearshore waters throughout the year, while several other dolphin species may be seen from coastal vantage points on rare occasions.

Other regular cetacean species in coastal waters

Antarctic minke whale

AVERAGE SIZE: 8.5 to 9 m

KEY FEATURES: Pointed head, falcate dorsal fin, uniform light grey flippers.



Dwarf minke whale

AVERAGE SIZE: 6.5 to 7 m

KEY FEATURES: Pointed head, falcate dorsal fin, white flipper patch and shoulder blaze.



Southern right whale

AVERAGE SIZE: 15 m

KEY FEATURES: Broad back with no dorsal fin. Head callosities.



Peale’s dolphin

AVERAGE SIZE: Up to 2.2 m

KEY FEATURES: Tall, falcate, bi-coloured dorsal fin, striking light grey flank patch and tailstock blaze, dark face and chin.



Killer whale

AVERAGE SIZE: 5 to 8 m

KEY FEATURES: Black and white colouration, white eye patch, tall dorsal fin, grey saddle.



Commerson’s dolphin

AVERAGE SIZE: Up to 1.5 m

KEY FEATURES: Black and white colouration, small rounded dorsal fin, poorly defined beak.

Observing sei whales

When and where to look

The main sei whale season in the Falkland Islands extends from January to May. Hotspots include Cape Pembroke, Berkeley Sound, Falkland Sound, Queen Charlotte Bay, King George Bay, Byron Sound and around Saunders Island.

Whales can readily be seen from shore, particularly from headlands, islands or cliff tops that are adjacent to open ocean. The Cape Pembroke lighthouse is an excellent and accessible place to search for them close to Stanley. Whale-watching boat trips from Stanley to Berkeley Sound can be organised via the Falkland Islands Tourist Board or directly with launch companies. Sei whales are often observed from the ferry that runs between East and West Falkland. They can also be glimpsed from the air during the inter-island flights.

What to look for

Sei whales tend not to breach or lift their tails, and a typical view comprises a long back rolling at the surface followed by the prominent dorsal fin. The main cue to search for is the tall "blow" that is produced when the animal exhales at the surface. The blow reaches around 4 m in height and can be seen several miles away in favourable conditions. The use of binoculars can greatly help with spotting blows and backs breaking the surface.



The tall blows from a group of sei whales

Code of conduct

Sei whales are vulnerable to injury and disturbance during interactions with boats. If you observe whales from a boat, the following guidance may help to minimise any impacts.

- ▶ Slow down to a maximum of 6 knots speed at least 300 m away from the whales.
- ▶ Don't approach whales from directly ahead or astern. Instead, angle in gradually from the side and position the boat parallel to the whales.
- ▶ Give the whales space. Maintain a distance of at least 100 m. If calves are present the minimum distance should be increased to 200 m.
- ▶ Avoid any sudden change in vessel heading, speed or engine gear when in proximity to whales, to avoid startling or striking them.
- ▶ Limit your time to less than 30 min in proximity to any individual or group of whales.
- ▶ Don't attempt to touch, feed or swim with whales.

REPORT YOUR SIGHTINGS

Submitting your records of sei whales (and other cetacean species) will contribute to ongoing monitoring and conservation of these animals in the Falklands.

Please submit your records to Falklands Conservation providing as much information as possible including the date and time, location and estimated group size.

Tel: 22247;

Email: whales@conservation.org.fk

FALKLANDS CONSERVATION



Falklands Conservation is a non-governmental organisation working to protect the wildlife in the Falkland Islands for future generations. It undertakes practical conservation projects, surveys and scientific studies, conducts annual monitoring of seabird populations, rehabilitates oiled penguins, publishes guides and information on many aspects of the Falkland Islands environment, and involves islanders of all ages in its activities, including running a Watch Group for children. It relies on donations and public support to achieve its work. The sei whale is a flagship species for the Falkland Conservation marine programme, highlighting the need for a best practice approach to marine development and management.



Partnering with the local and international community to conserve the natural environment of the Falkland Islands.

To join Falklands Conservation, adopt a penguin or find out more about our work, go to www.falklandsconservation.com.

Falklands Conservation is a UK registered charity no. 1073859 and a company limited by guarantee in England and Wales no. 03661322.

ACKNOWLEDGEMENTS Photos: Sarah Crofts, Pamela Andrea Quilodran Jelbes, Andy Stanworth, Maria Taylor and Caroline Weir. Illustrations: Phil Coles.

This leaflet was produced as part of the Falklands Conservation project "Developing a site-based conservation approach for sei whales *Balaenoptera borealis* at Berkeley Sound, Falkland Islands", which received European Union funding through the BEST 2.0 Programme.



www.falklandsconservation.com

FALKLANDS CONSERVATION

Partnering with the local and international community to conserve the Falkland Islands' natural environment.

Falklands Conservation rely on donations and public support to carry out our work in the Falkland Islands. If you would like to join those already supporting our work, please consider becoming a member or adopting a penguin via our website

www.falklandsconservation.com

Or contact ukadmin@conservation.org.fk for more options.

For regular updates on our work, follow us online



[@FalklandsConservation](https://www.instagram.com/FalklandsConservation)



[@FI_Conservation](https://twitter.com/FI_Conservation)

