

FinBook Roebuck Bay

An identification catalogue for
snubfin dolphins in Roebuck Bay



FIRST EDITION – 2018



Department of Biodiversity,
Conservation and Attractions





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Welcome to FinBook Roebuck Bay

For thousands of years, Yawuru people have lived along the foreshores of Roebuck Bay, part of the Yawuru traditional estate. Roebuck Bay is also known as Yawuru Nagulagun, which means Yawuru sea country, and is a place of exceptional value. The Yawuru Nagulagun / Roebuck Bay Marine Park is managed jointly by the Yawuru Native Title Holders and the Western Australian State Government.

The Yawuru story is one of resilience and pride. We recognise all the old people who carried the stories from *Bugarrigarra* (the Dreaming), walked our lands, fished and hunted, and survived from the water places.

In September 2016, Yawuru Registered Native Title Body Corporate (RNTBC), the State Government and other relevant parties signed an Indigenous Land Use Agreement (ILUA) to provide for the creation of the marine park over specified areas of Roebuck Bay.



Roebuck Bay has some of the most productive tropical intertidal flats in the world, making it very important for Yawuru fishing, hunting and gathering of sea foods. It is one of the most important staging sites for migratory *gamirda-gamirda* (shorebirds) globally and for this reason it was declared a Ramsar Wetland of International Significance in 1990 and is a significant tourist destination.

Seagrass and macroalgae communities provide food for protected species such as the *nganarr* (dugong) and *gurlibil* (turtles). Marine mammals such as the Australian snubfin dolphin and Australian humpback dolphin frequent the waters of Roebuck Bay and humpback whales pass through on their annual migration.

Many of the animals that live and feed in the bay such as dolphins, *gurlibil* (turtles) and *nganarr* (dugongs) are considered indicator species. This means that if there are good population numbers of these animals, there is likely to be good abundance of the fish and seagrasses they eat and therefore the bay is likely to be in good health.

Get involved with the Dolphin Watch app

Now you can contribute valuable information about Australian snubfin dolphins, as well as other marine mammals, with the *Dolphin Watch* tracking and identification smartphone app. Download the *Dolphin Watch* app to your tablet or phone and start observing dolphins and dugongs in Roebuck Bay.

Each snubfin dolphin has a distinct dorsal fin located on the top of its body. This identification guide includes photographs of many of the snubfin dolphins that have been observed in Roebuck Bay.

Each snubfin dolphin has been given identification codes by researchers, however as more data and photos are recorded, it is envisaged that a full *FinBook* catalogue will be able to provide names and more distinguishing characteristics of the 'snubbies' as we get to know them better.

The *Dolphin Watch* app is available to download for free from the App Store (iPhone) or Google Play (Android).

"Traditional knowledge is passed down to us in stories. For instance, that's how was known that the dolphins bring in the fish."

Junie Djiagween,
Yawuru Elder*

*Quote taken from: *Walyjala-jala buru jayida jarringgun buru Nyamba Yawuru ngan-ga mirli mirli Planning for the future: Yawuru Cultural Management Plan*, August 2011 (Pg 44) Yawuru RNTBC

Dolphins in Roebuck Bay

Snubfin dolphins (*Orcaella heinsohni*)

Snubfin dolphins were formally described as a species in 2005 and are now known to be endemic to Northern Australia and Papua New Guinea. In Western Australia, snubfins are mainly found in the Kimberley.

In Roebuck Bay, the population size of snubfin dolphins is estimated to be 130, making it the largest known population in the Kimberley region.



This population is thought to reside in the Yawuru Nagulagun / Roebuck Bay Marine Park and Kimberley Ports Authority waters and occasionally visit surrounding areas such as Cable Beach. During their life they get scars, nicks and notches on their dorsal fin which can be used as natural tags to tell individual dolphins apart. This means we can build profiles of individuals including calving and preferred associates.

The population status of snubfins elsewhere in Western Australia is unknown. A few individuals have been repeatedly seen in the Pilbara in areas such as Exmouth Gulf and inshore of Barrow Island. These are presumed to be vagrants travelling down from the Kimberley and may be colonising areas further south. However, a viable extant population has not been identified in the Pilbara.



The Australian snubfin dolphin is dark on top, a lighter shade of brown around the middle and the belly is white. Depending upon the light and water colour this species can look as though it is white to dark brown. It has a rounded forehead with no beak, unlike most other dolphin species in Australia. It has a particularly small rounded dorsal fin, and a distinct crease around the neck, which is quite flexible. The average length of this animal is about 2m. As they age they become very scarred all over their bodies from interactions with each other and sharks.

While *FinBook Roebuck Bay* only includes an identification catalogue for snubfin dolphins, another four dolphin species are occasionally sighted in Roebuck Bay. Please report your sightings of all dolphins to the Department of Biodiversity, Conservation and Attractions using the *Dolphin Watch* smartphone app on your iOS or Android device.

Other dolphin species seen occasionally in Roebuck Bay

Humpback dolphin (*Sousa sahulensis*)

The most obvious features of the humpback dolphins is their long (often white-tipped) thin beak, small triangular dorsal fin and distinctive hump in front of the dorsal fin. The maximum length is less than 3m. The colour of these animals varies

by age and area and they may appear quite pale, but they can darken to a lead grey colour as they age. The undersides are pale and the dorsal fin may be white in older animals and males.



Previous page Snubfin dolphin. **This page** Humpback dolphins. Photos – Holly Raudino.

Illustrations – R.Swainston/anima.net.au

Spinner dolphin (*Stenella longirostris*)

The body is usually slender with a relatively flat melon and long, well defined-beak with a black tip. There is an eye-to-flipper stripe that extends from the eye to the mouthline. The dorsal fin is positioned mid-back and is relatively tall and either slightly falcate (sickle-shaped) or triangular. Their colouration is three toned with a dark back, grey sides and a paler underside but they may appear all grey. They are not always as acrobatic as their name suggests. A dwarf subspecies (*S. l. roseiventris*) can be found in tropical waters and only reaches 1.5m in total body length.



Bottlenose dolphin (*Tursiops aduncus*)

Bottlenose dolphins are sleek and streamlined, have a prominent dorsal fin, and can vary in size, shape and colour depending on where they are found. In general, they have a dark grey back and a light grey belly. They have a short, thick beak. The smaller Indo-Pacific bottlenose dolphin reaches a maximum length of 2.7m and weighs up to 230kg. They are the most common dolphin found in WA coastal waters. A larger, offshore species (*Tursiops truncatus*) is found further from the coast. *T.aduncus* is generally more coastal.

**False killer whale** (*Pseudorca crassidens*)

This species has a long, slender body and narrow, tapered head with a rounded snout. Its dorsal fin is high and curved and the narrow, tapered flippers have a distinct hump or elbow on the front edge. The body is black with a grey chest, although the sides of the head are sometimes light grey. Average length is 4.5–5.5m.



Previous page Spinner dolphin. *Photo – Carol Palmer.* **This page** Bottlenose dolphin.

Photo – Holly Raudino. False killer whale. *Photo – Carol Palmer.*

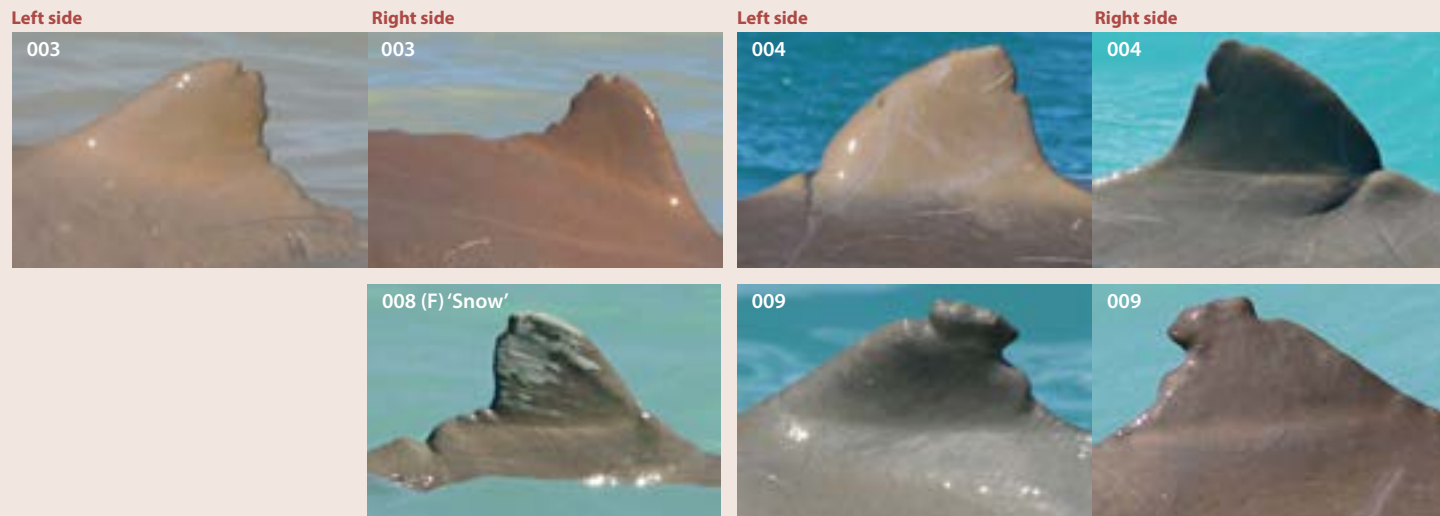
Snubfin dolphin catalogue

The number at top left is the identification code given to each dolphin by researchers. Names are included if available.

(F) indicates adult female due to presence of a dependent calf.

(J) indicates an immature individual or juvenile (weaned). This is based on body length, which is smaller than an adult.

This photo identification dorsal fin catalogue was prepared by Ashley Marino, Corrine Douglas and Holly Raudino with valuable photo contributions from Deb Thiele and Alex Brown.



Left side

010



Right side

Left side

012 (F)



Right side

013



013



014



014



015



018



018



Left side

019



Right side

Left side

020



Right side

021



021



022



022



024



024

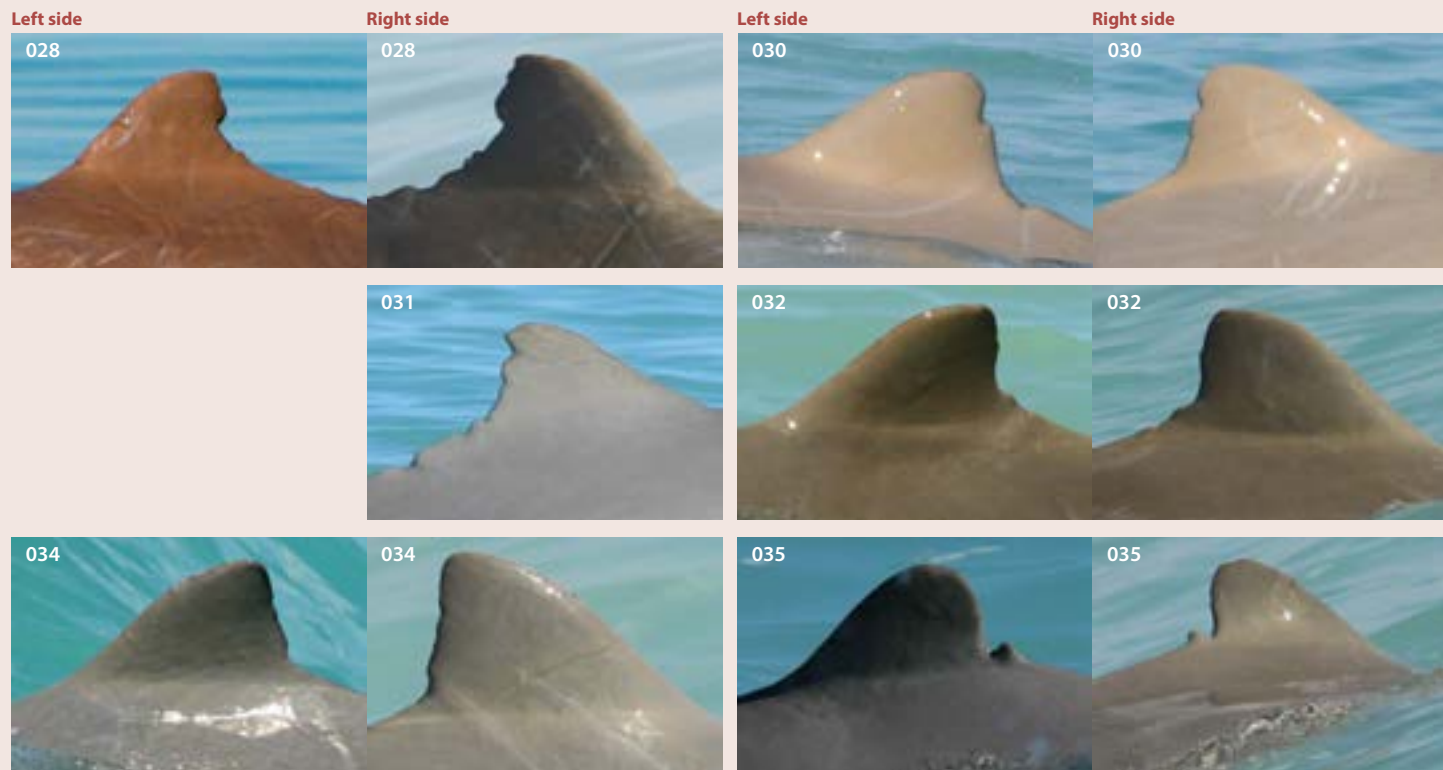


025 (F) 'Grungè'



025 (F) 'Grungè'





Left side

036



Right side

036



Left side

037



Right side

041



041



043



043



044



044



046



046



Left side

Right side

048



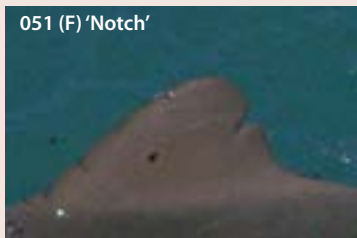
Left side

Right side

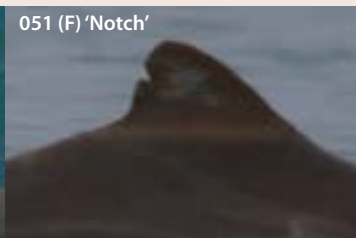
049



051 (F) 'Notch'



051 (F) 'Notch'



053



053



054 (F)



054 (F)



056 (F)



056 (F)



Left side

059



Right side

059



Left side

061



Right side

061



065



066



067



067



068



068



Left side

069



Right side

069



Left side

071



Right side

071



072



072



074



074



075



075



077



077





Left side

090



Right side

Left side

091



Right side

092



093



093



094



094



095



Left side



Right side



104 'Rumpus'



Left side



Right side



103



105



Left side



Right side



Left side



Right side



110 (F)



110 (F)



113 'Jabberwocky'



114 (F)



114 (F)



117



117



Left side

119



Right side

Left side

121



Right side

126 (F)



126 (F)



129



134



138



138



Left side

Right side

Left side

Right side

139



145 (J)



156



164



167 (F)

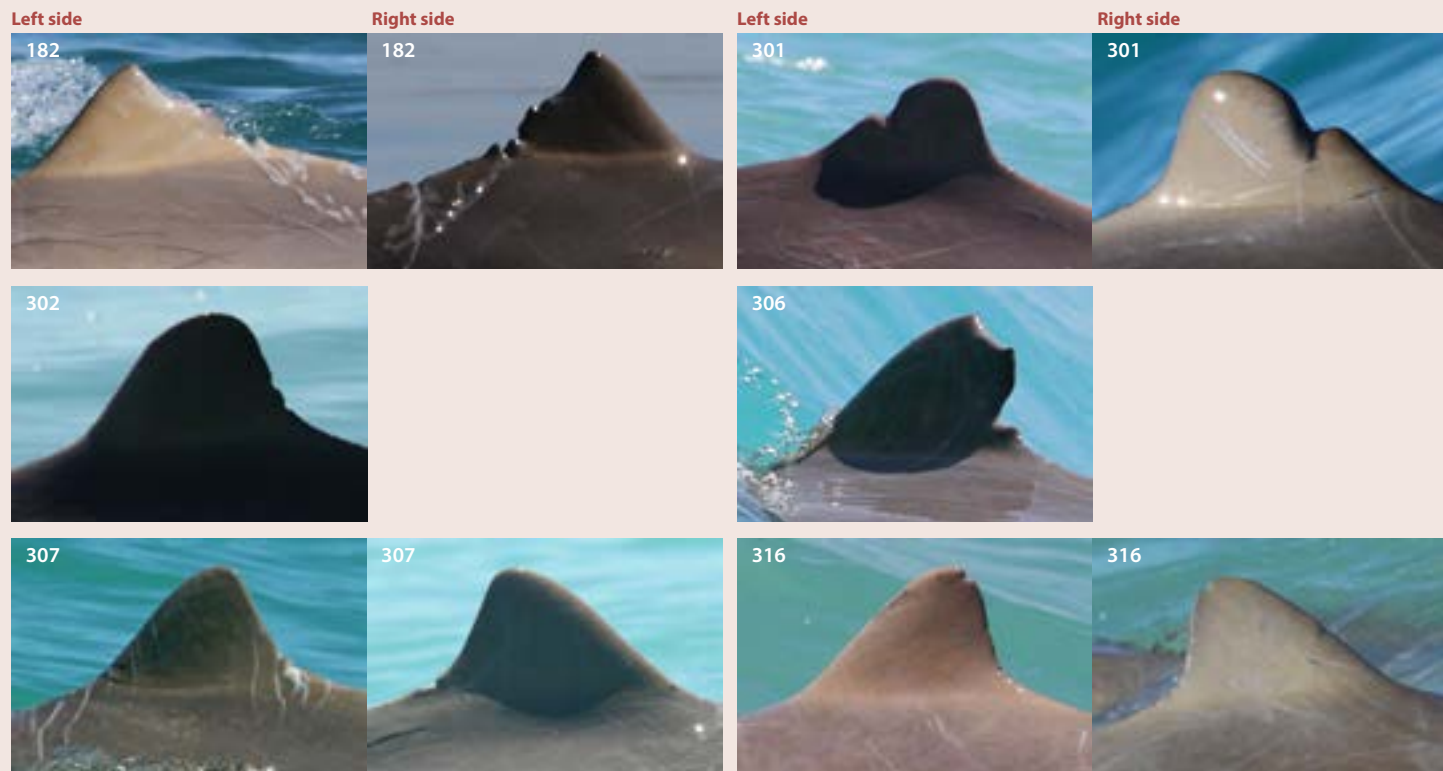


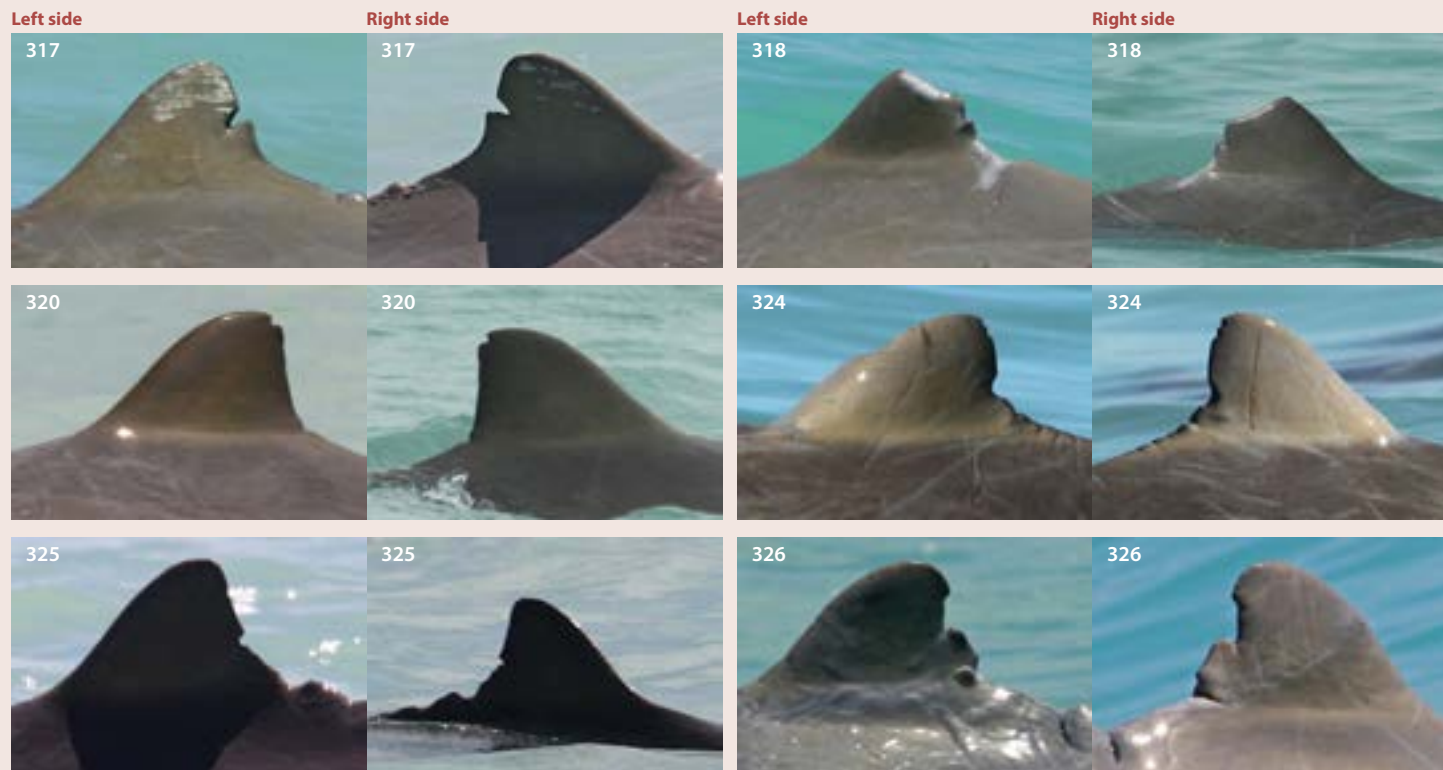
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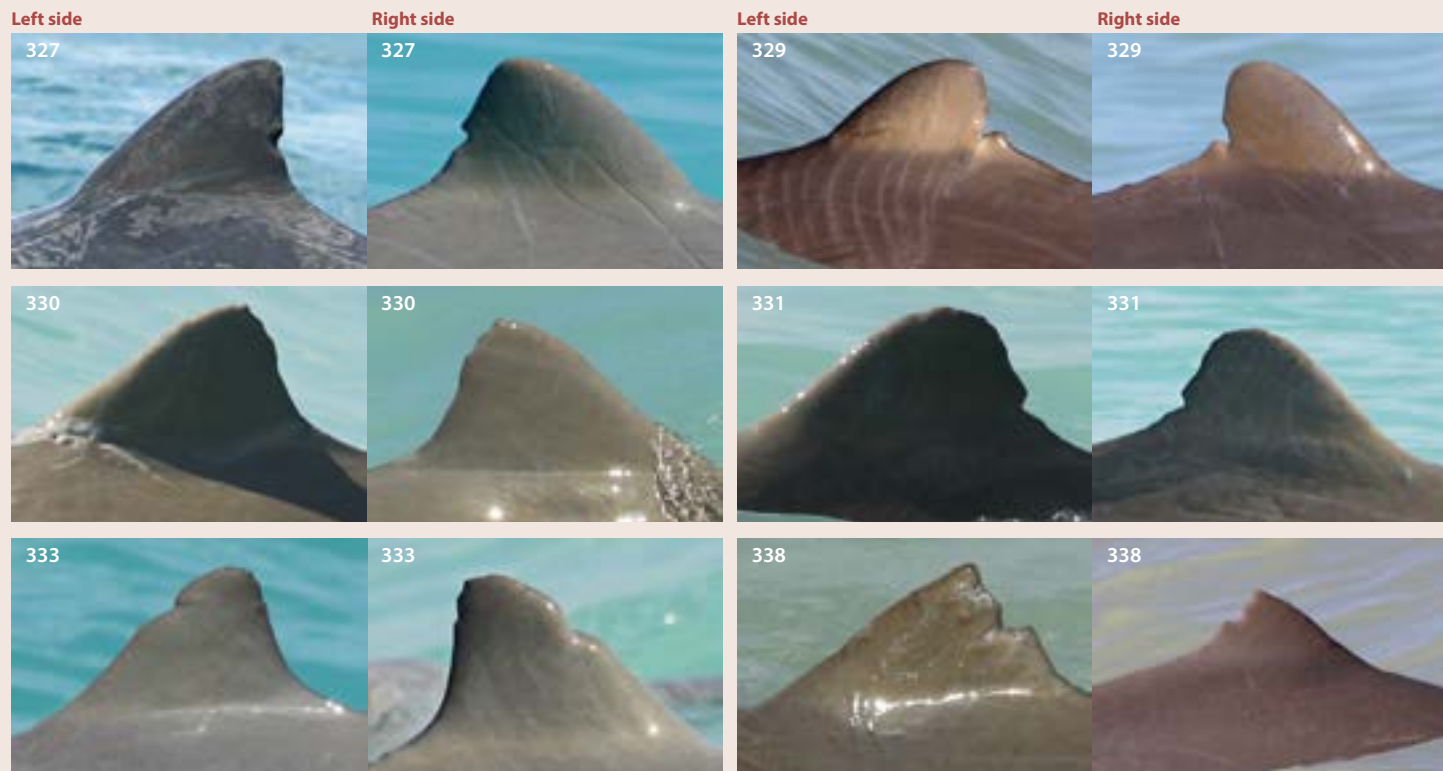


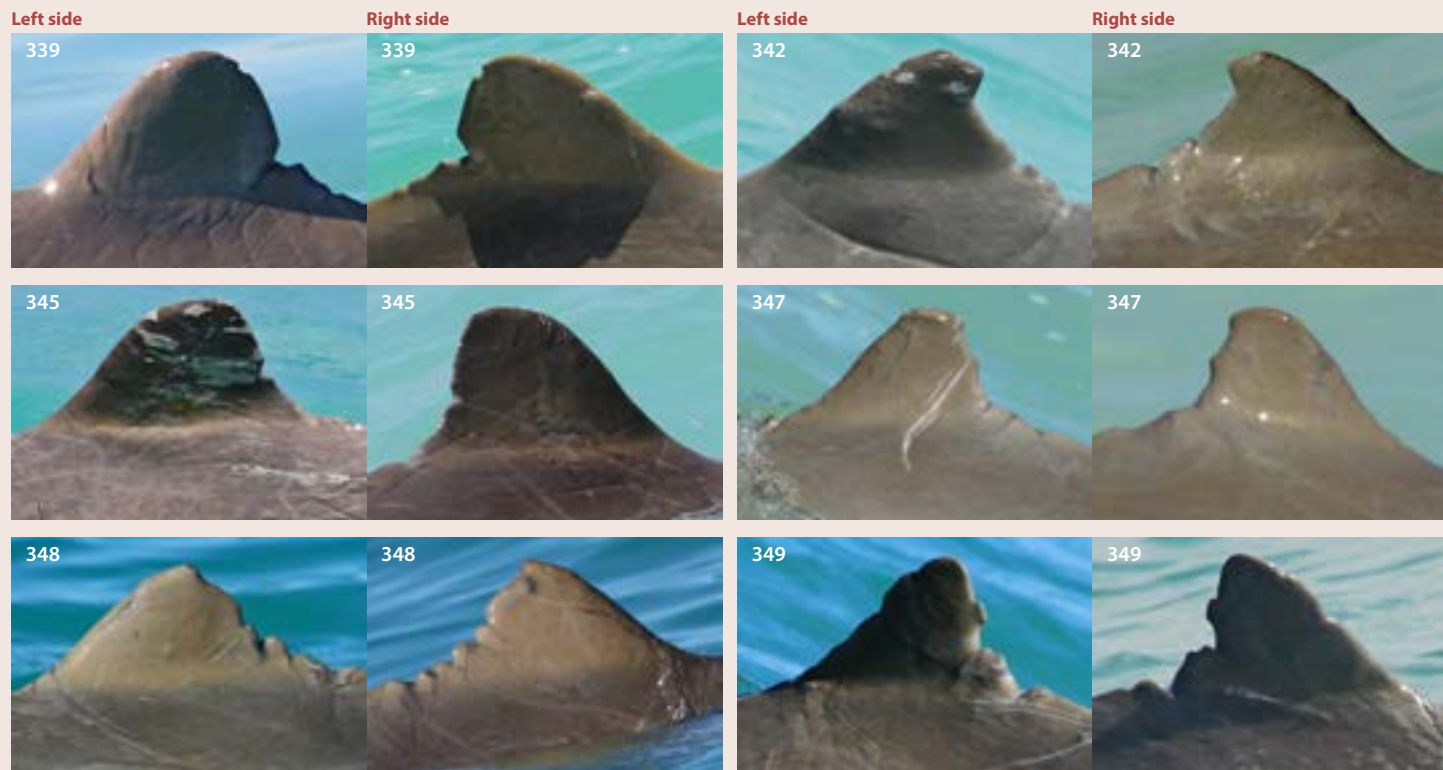
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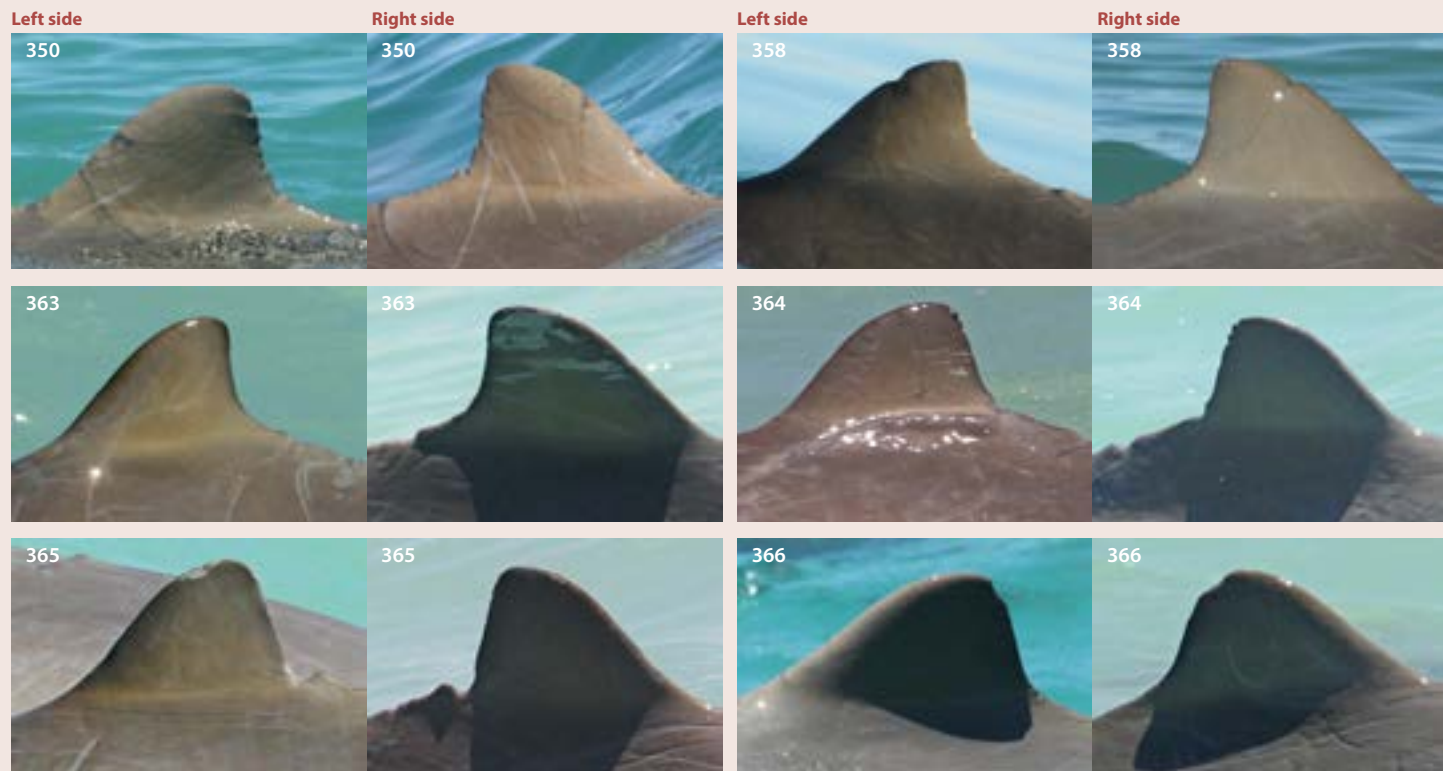












Left side

376



Right side

376



Left side

379



Right side

379



384



385



385



386



386

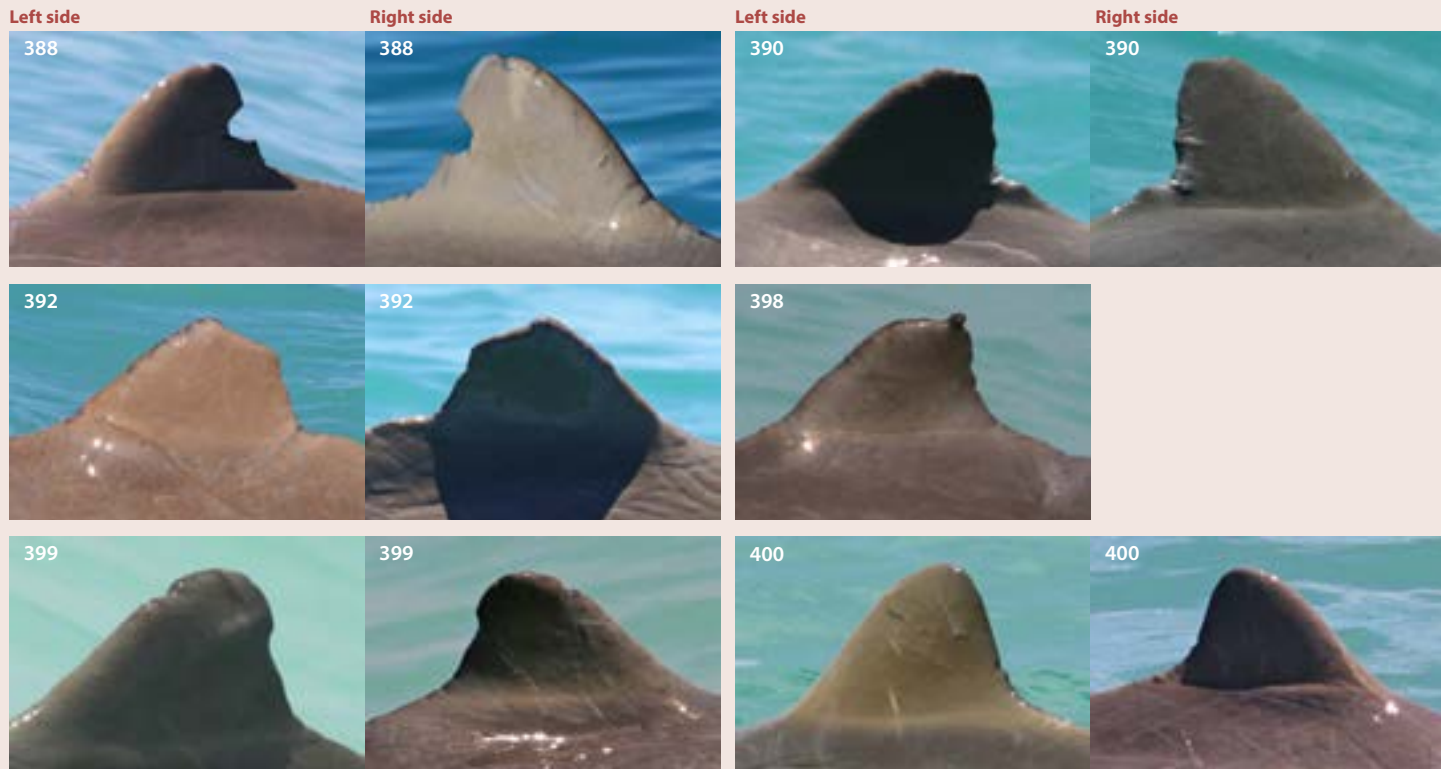


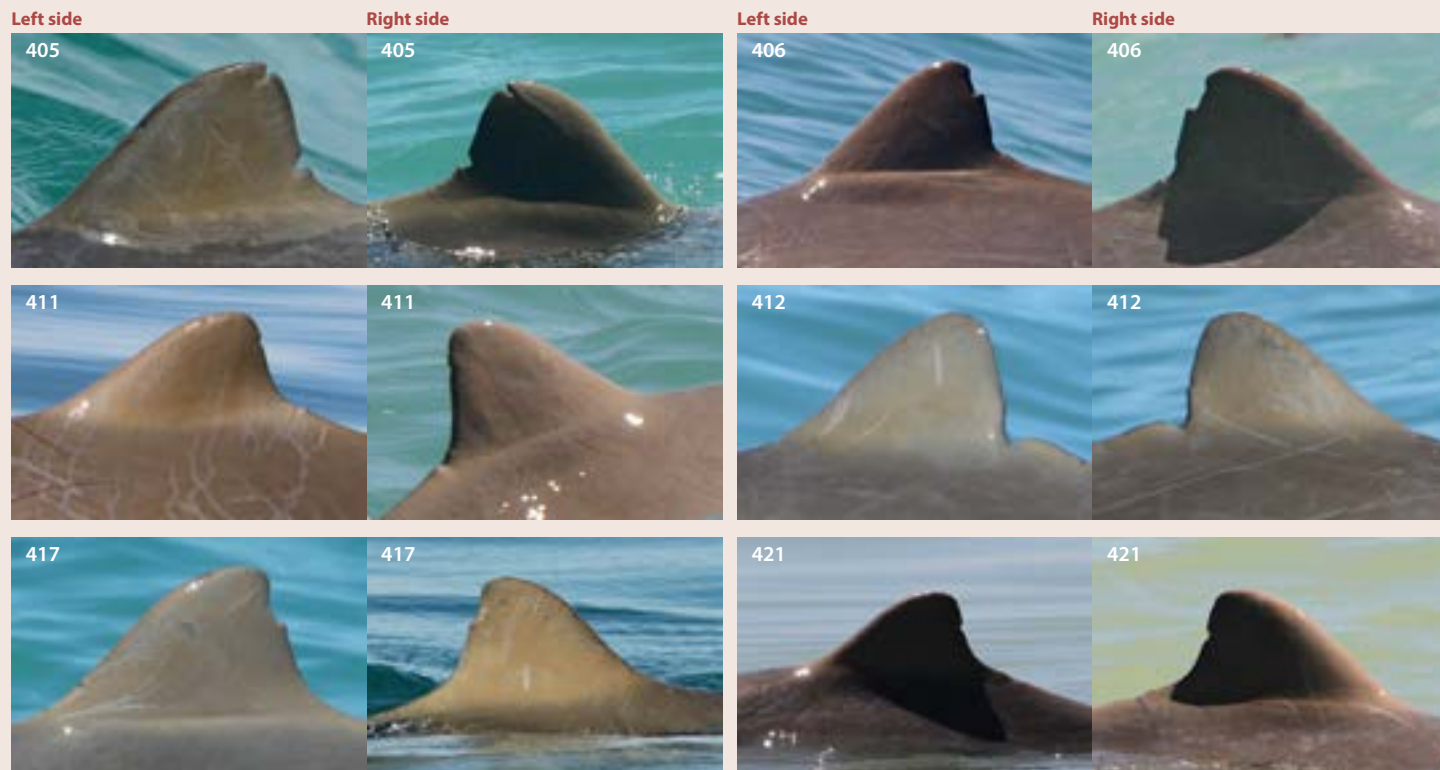
387



387







Left side

423



Right side

Left side

424



Right side

425



425



426



426



427



427



428



428



Left side

434



Right side

Left side

444



Right side

444



Dolphin stories

Snow

Snow is a bit of a loner, which may be because she has a really interesting feeding technique and likes to keep her secrets. Spitfishing is a curious method of fishing that only a few snubfins have perfected and has only been seen in Roebuck Bay. Snow is often seen at the mouth of Crab Creek on a rising tide, spitting at baitfish. The spits are really powerful, like a thick garden hose turned on full blast for two seconds. She will send out two or three spits at a time and completely confuse the baitfish. Often the baitfish will jump straight into her mouth or swim in panicked circles until she scoops them up. Snow was first seen in 2009 and she's not always alone. During neap tides somewhere between Crab Creek and Thangoo, she gets together with her mates for a bit of socialising, frivolity and fun. Snow is also known by the identification code 008.

Other snubfins nuzzle through the mud in shallow water eating crabs and fish that are hiding on the bottom. Often their tails are waving around up in the air and when they come to the surface to breathe, their faces are covered in mud.



Grunge

Grunge, also known as 025, is really easy to spot. Most of her dorsal fin is missing, with only a small piece left, flopping on one side. Notice the scrape marks on her back, which looks as if she has been entangled in a net. Other marks may happen when snubfins rub against mangrove trees or rocks to rid themselves of barnacles, or during rough play and courtship.



Grunge was first sighted in May 2007 with her calf and a male snubfin named McNee, who may be the lucky father. Since then she has been seen every year swimming with her calf and a group of mates including Nardoo, Fennel, Notch, Snow, Bezoar, Cinque, Parch, Orion, Suey and Chop.

Grunge is a very sociable dolphin and also likes the company of bottlenose dolphins. It's not unusual to see them playing and feeding together.

Jabberwocky

Jabberwocky, or 113, is a female snubfin with a deep injury to her back.

Snubfins, like all dolphin species, have amazing healing powers and wounds like this heal up quickly. She was first sighted on 7 May 2007. These markings allow marine biologists to identify each individual dolphin just by taking photos.



Left Snubfin dolphin Snow has perfected a curious method of fishing, spitting at her prey.
Photo – Deb Thiele. Dolphin stories by Jason Fowler (Environs Kimberley) and Deb Thiele.

Notch

Notch, also known as 051, is one of the proud mums of Roebuck Bay and she has been seen with her calf over many years. She has a distinctive V-shaped piece out of the back of her dorsal fin and this makes her one of the easiest snubfins to spot. She also has parallel slices across her back, possibly caused by another snubfin giving her a love bite.



Notch was first sighted and named in 2006 by the Rushford family who were members of the community sighting program. Notch was photographed again in 2008 with a calf, Koen (named after a well-known cetacean conservationist who lives in Peru). Notch has been seen every year from 2006 to 2014 .

Rumpus

Rumpus, or 104, is perhaps the toughest snubfin dolphin in Roebuck Bay. He has suffered horrific injuries to his dorsal fin and tail yet continues to survive. A study in 2010 showed about 75 per cent of Roebuck Bay's snubfins had injuries caused by rough play, courtship, sharks, boat strike and entanglement with fishing line and nets. The State Government introduced commercial fishing licences in Roebuck Bay and removed gillnets in November 2012, and it is hoped these measures will help reduce the number of dolphin injuries and entanglements.



Be Dolphin Wise

It's easy to help care for dolphins in Roebuck Bay by following these simple rules:



Go slow for those below – slow down for dolphins – dolphins often form resting groups, so keep an eye out for them and slow down if you spot them.



Let dolphins feed themselves – feeding dolphins is illegal and can leave them vulnerable to entanglement from fishing line, boat strikes and disease.

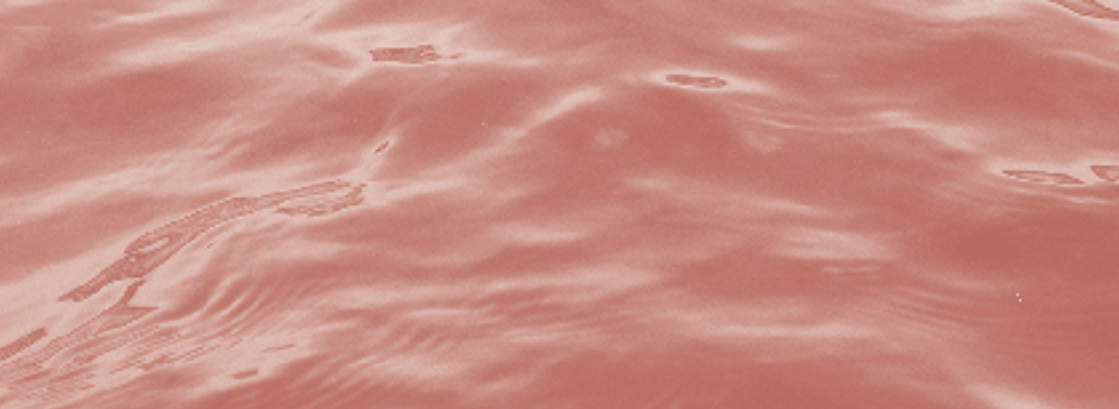
* Bunbury Dolphin Discovery Centre and Monkey Mia Shark Bay are licensed for supervised feeding



Support a Clean Marine environment – take your rubbish home – dolphins, particularly calves, can get tangled in fishing line. Dispose of unwanted fishing line responsibly.



Enjoy dolphins from a distance – dolphins have sensitive hearing and are easily disturbed by human activities. Maintain your distance where possible and move away if the dolphin is disturbed. Keep calves safe. Keep clear of mothers and calves so they are not separated.



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