FinBook **Mandurah**

An identification catalogue for dolphins observed in the Peel-Harvey Estuary

SECOND EDITION – 2018

DOLPHIN WATCH®

ESTUARY GUARDIANS PEEL - HARVEY

JTC JOHN TONKIN COLLEGE Mandurah Western Australia

Murdoch UNIVERSITY

PHCC Working Together Peel-Harvey Catchment Council

GOVERNMENT OF WESTERN AUSTRALIA

Department of **Biodiversity, Conservation and Attractions**

State Natural Resource Management Program

Foreword

It is with great pleasure that, as Patron of the Perth *Dolphin Watch* project and a member of the Mandurah community since 1985, I write the foreword to the new edition of the splendid *FinBook Mandurah*. This book complements the highly successful *FinBook* for the Swan Canning Riverpark dolphins, and serves as a guide to identify individual animals so that we can develop a deeper understanding of the lives and needs of the dolphin population in the Peel-Harvey Estuary – animals that are so close to many who live in or visit the Peel region. This book enables us all to become citizen scientists and add to the data collected by the Mandurah Dolphin Research Project. By becoming familiar with the dolphins and having more eyes on the estuary, our community can become more connected to the local environment and more protective of it.

I particularly compliment The Estuary Guardians team from John Tonkin College who realised that we needed a *FinBook* for the many Mandurah dolphins. The first edition was produced in 2016, working with the Mandurah Dolphin Rescue Group who have watched over the dolphins for many years, along with the Mandurah Dolphin Research Project group. The achievement has been recognised by many including the Peel-Harvey Catchment Council and the Department of Biodiversity, Conservation and Attractions.

Since 2016, far more information has been gathered about the Mandurah dolphins, hence the publication of this updated second edition. I am sure that the knowledge gained by referencing this book will continue to be crucial in ensuring the survival and wellbeing of dolphins in the Peel-Harvey Estuary. Such knowledge is essential for good policy decision making and for sound management practices. Moreover, the book is a template for those who wish to monitor and protect other endangered animal populations. I commend this book to you and congratulate again all who have worked to bring it to us.

Professor Lyn Beazley AO FTSE

Above Peel-Harvey resident female Twenty-one with her calf Nikaila, who was born in 2017. Twenty-one is Twenty-two's daughter. In March 1997, Twenty-one and Twenty-two were freeze branded then released into deeper water after they stranded with Zero-one and three other dolphins.

Front cover Zero-one swimming in a shallow pool of water between sandbanks at Herron Point where he was stuck with Fourteen for three days in January 2018.

Dolphin photos Krista Nicholson, Mandurah Dolphin Research Project, Murdoch University

Bird photos Bill Howard

Table of contents

Welcome to **Fin**Book **Mandurah**

After another exciting year, we have produced the second edition of *FinBook Mandurah*. This book will help the Mandurah community and visitors identify and learn about dolphins in the Peel-Harvey Estuary, while forming a new connection with local wildlife and the waterways.

To help identify individual dolphins, *FinBook Mandurah* includes photographs of the right side of each dolphin's dorsal fin. The unique nicks and notches on the trailing edge of the dorsal fin, most often a result of interactions between the dolphins, and other significant markings such as sunburn and rake marks, are all useful for identifying individual animals.

Estuary Guardians, a community group formed by students in John Tonkin College's Surf Science Program in 2015, collaborated with Mandurah Volunteer Dolphin Rescue Group, Mandurah Dolphin Research Project, Mandurah Cruises, Peel-Harvey Catchment Council and Professor Lyn Beazley to compile this new and improved *FinBook Mandurah*.

Taylah Shier (Estuary Guardian)

Dolphin Watch

Dolphin Watch is a collaborative, citizen science research and education project developed by the Department of Biodiversity, Conservation and Attractions (DBCA) together with Murdoch and Curtin universities in 2009 to help learn more about the resident bottlenose dolphins in the Swan Canning Riverpark. *Dolphin Watch* is now extended to the resident dolphins in the Peel-Harvey Estuary.

Researchers and DBCA staff train volunteers, who play an important role in monitoring dolphins as citizen scientists, in techniques for recording the movement and behaviour of dolphins. Volunteers play an essential role in monitoring dolphins as citizen scientists. By attending training, people become more informed about conservation issues and can participate in activities to help the waterways and the wildlife that inhabits them.

Volunteer information, photographs and videos help build a picture of the dolphin community. *Dolphin Watch* shares information and expertise so that industry, government and the community can develop effective management activities and policy to help protect dolphins and their habitats.

The *Dolphin Watch* smartphone app enables community members to record information such as location and behaviour about the dolphins they encounter. Researchers can use this information to better understand how the dolphins use the Peel-Harvey waterways. The *Dolphin Watch* app is available to download for free from the App Store (iPhone) or Google Play (Android).

Use the QR code below to visit the Estuary Guardians website and listen to interesting stories about some of the Mandurah dolphins.

To use the QR code, download a QR reader and hold your mobile phone over the code until it clicks. You will then be taken to the Estuary Guardians website where you will be able to listen to dolphin stories.

PHCC Working Together
Peel-Harvey Catchment Council

Ramsar Convention on Wetlands

The Peel-Yalgorup Wetlands

The Peel-Yalgorup Wetlands System is located approximately 70km south of Perth and stretches more than 60km from north to south and approximately 10km east to west. Its 26,530 hectares includes the Peel Inlet, Harvey Estuary, Lake McLarty, Lake Mealup, several conservation reserves, and the lands and 10 lakes of Yalgorup National Park, including Lake Clifton and Lake Preston. The Peel-Yalgorup Wetlands System meets seven of the nine criteria against which a site may be Ramsar-listed.

The Peel-Yalgorup Wetlands System was listed as Ramsar site 482 in 1990, recognising it as an internationally significant wetland under the Convention on Wetlands of International Significance, especially as waterfowl habitat. This convention was signed in Ramsar, Iran in 1971 and is more commonly known as the Ramsar Convention. It was the first modern international agreement on the conservation and sustainable use of natural resources. Australia was among the first countries to sign the agreement, which came into force in Australia in 1975. Australia has 65 Ramsar-listed sites.

The agreement's mission is 'the conservation and wise use of all wetlands through local, regional and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world.' All signatories to the Ramsar Convention commit to the wise use of all the wetlands and waters in their territory. The agreement covers all aspects of wetland conservation, recognising them as ecosystems that are extremely important for biodiversity conservation and for the wellbeing of human communities.

The international importance of the Peel-Yalgorup System

- The Peel-Yalgorup Wetlands System incorporates the largest and most diverse estuarine complex in south-west Australia.
- The Peel Inlet and Harvey Estuary are south-west Australia's most important areas for waterbirds, supporting more than 20,000 each year. More than 150,000 birds were recorded at one time in the 1970s. Shorebird 2020 Count data for 2008 to 2017 showed the Peel-Yalgorup Wetlands System supported an average of 44,268 birds (most counted was 92,665 in 2013 and least was 20,852 in 2017) and 54 shorebird species (most was 62 in 2013 and least was 40 in 2015) each year.
- The Peel-Yalgorup System regularly hosts more than one percent of the world's populations of 14 waterbird species, including at least six migratory shorebird species. These include the red-necked avocet, red-necked stint, red-capped plover, banded stilt, Caspian tern and fairy tern.
- Lake Clifton is one of only two locations in south-west Australia and among very few in the world where living thrombolites occur in inland waters. It has the largest 'lake-bound' microbialite reef in the southern hemisphere. The thrombolites were listed as critically endangered in 2010.
- The Peel-Yalgorup Wetlands System includes good examples of coastal saline lakes such as Lake Preston and freshwater marshes and lakes such as Lake Mealup.
- Australia also has international agreements with China (CAMBA), Japan (JAMBA) and the Republic of Korea (ROKAMBA) to protect migratory birds and their habitats.

Left The curlew sandpiper is a migratory bird from the northern hemisphere that summers in the Peel-Harvey Estuary and other sites in Australia. Their breeding habitat is the lowland tundra of Siberia. Photo – Bill Howard

Meet the Mandurah dolphins

In 1990, 10 male dolphins stranded in Lake Goegrup in the Serpentine River. Unfortunately two of the dolphins passed away but the remaining eight were freeze branded by the then Department of Conservation and Land Management with numbers 01 to 08. They were released into deeper water. Since then, there have been 35 known live dolphin strandings in the Peel-Harvey waterways involving 60 dolphins, some who have stranded on multiple occasions. The last individual to be freeze branded was Twenty-three in 1997. The names of freeze branded dolphins are taken from these numbers.

Most dolphins that have live stranded are healthy individuals who strand in areas where they spend a lot of time. For example, Zero-one has stranded at least three times since 1990, most recently in January 2018. Many live stranded dolphins are rescued by the Department of Biodiversity, Conservation and Attractions and Mandurah Dolphin Rescue Group. Others who are not found in time, or at all, often suffer extensive sunburn that results in distinct, bright white scarring.

Mandurah Dolphin Research Project

The Mandurah Dolphin Research Project (MDRP) was established to conduct a population assessment, including abundance estimation, for dolphins occupying the Peel-Harvey Estuary and adjacent coastal waters. Since research started in January 2016, more than 1000 dolphin groups have been encountered and approximately 500 individual dolphins identified. It has been discovered that there is a year-round resident community of 80 dolphins in the Peel-Harvey Estuary.

Nineteen of these dolphins have live stranded at least once in their life. During two years of study, 15 calves have been born into the community and sadly, nine dolphins, including four calves, have passed away. *FinBook Mandurah* includes 28 of the well-marked resident dolphins regularly seen throughout the estuary system.

Approximately 25 coastal dolphins regularly reside in Dawesville Cut. Some of them occasionally visit the estuary and associate with the Peel-Harvey resident dolphins. Similarly, some of the Peel-Harvey resident dolphins occasionally venture out to sea and associate with some coastal dolphins. *FinBook Mandurah* includes 17 of the Dawesville Cut dolphins.

MDRP is a partnership between Murdoch University, City of Mandurah, Peel Development Commission through Royalties for Regions, Mandurah Cruises, Mandurah Dolphin Rescue Group, and John and Bella Perry.

FinBook **Mandurah** sections

FinBook Mandurah is divided into four sections representing different areas of the Peel-Harvey Estuary. Each individual dolphin is placed in one section only, based on where he or she is most often encountered. Individuals may also be encountered in other areas. The four sections cover the five zones in the *Dolphin Watch* smartphone app, shown on the map on the following page.

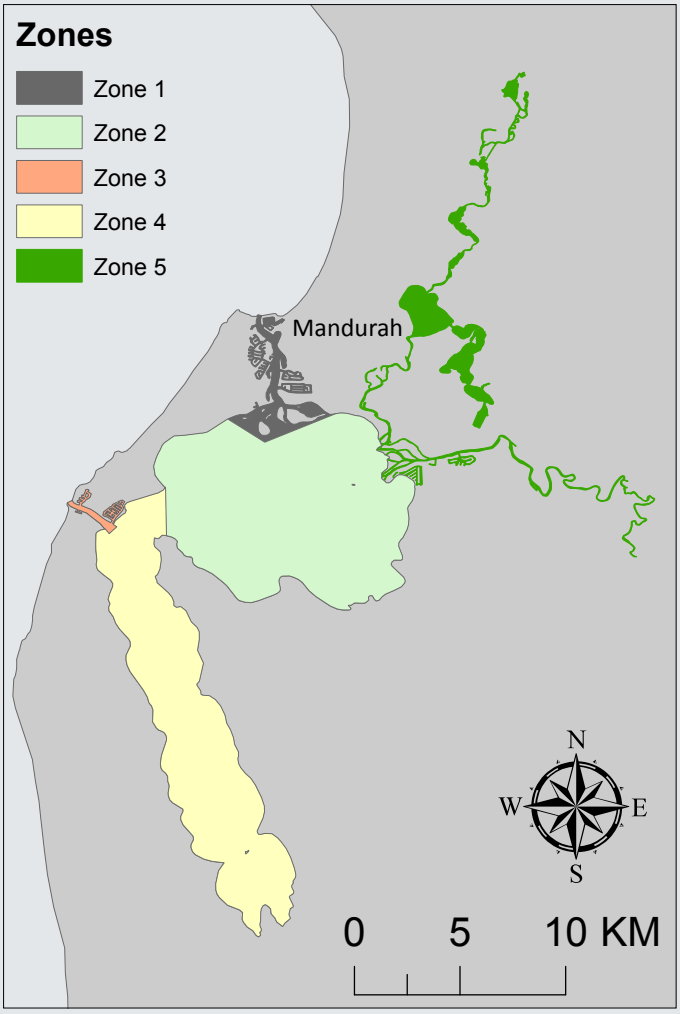
Town waters (Zone 1)
Adult females with calves often seen in town waters.

Rivers (Zone 5)
Females consistently observed in the Serpentine and Murray rivers.

All areas (Zones 1, 2, 4 and 5)
Females and males of all ages who use the entire Peel-Harvey waterways including the Serpentine and Murray rivers.

Dawesville Cut (Zone 3)
Coastal females and males of all ages who are often seen in Dawesville Cut but do not enter the Peel-Harvey Estuary.

The nicks and notches as well as scarring you can see on the dorsal fins are mainly caused by interactions with other dolphins. Some animals, like John Edwards, have lost part of their dorsal fin due to entanglement in fishing line. Others may have deeper wounds due to being bitten by a shark or hit by a propeller. All the marks are unique and allow us to identify the individuals over time.



The *Dolphin Watch* smartphone app divides the Peel-Harvey Estuary into five zones

Town waters **(Zone 1) Adult females**

Name **Lowblow**
Sex Female
Age Adult
Stranded No
Notes
Lowblow's calf, Benji, was born in 2015.

Name **Hatrick**
Sex Female
Age Adult
Stranded No
Notes
Hatrick's calf, Halo, was born in 2016. Halo was badly entangled in rope as a small calf. Doug Coughran, a senior wildlife officer with the Department of Biodiversity, Conservation and Attractions, disentangled Halo with the help of the Mandurah Dolphin Rescue Group. Halo is fit and healthy today.

Name **Nicky**
Sex Female
Age Adult
Stranded Yes
Year stranded 2006
Notes
Nicky was found stranded on tidal flats in 2006 with her calf and was released into deeper water. Nicky's current calf, Surprise, was born in 2015.

Town waters **(Zone 1) Adult females**

Name	**Christmas**
Sex	Female
Age	Adult
Stranded	Yes
Year stranded	2009

Notes

Christmas's body has white scarring from being sunburnt while stranded. She is Nicky's daughter. Her first calf, Easter, was born in 2016 but only lived for about seven months. Christmas became pregnant again almost immediately and had a new calf, Spirit, in January 2018.

Name	**Topnotch**
Sex	Female
Age	Adult
Stranded	No

Notes

Topnotch's calf, Autumn, was born in 2015 and is now independent.

Name	**Twenty-two**
Sex	Female
Age	Adult
Stranded	Yes
Year stranded	1997

Notes

Twenty-two and her then calf Twenty-one were stranded in 1997 and freeze-branded on both sides of their dorsal fins before being moved to deeper waters. Twenty-two's calf, Jac, was born in 2015.

Rivers **(Zone 5) Adult females**

Name	**Bendy Wendy**
Sex	Female
Age	Adult
Stranded	Yes
Year stranded	1998

Notes

Bendy Wendy's dorsal fin is curved to the right which can make the fin look very different when observed from different angles. She has white scarring from sunburn on both sides of her body.

Her calf, Pan, was born in 2016.

Name	**River**
Sex	Female
Age	Juvenile
Stranded	Yes
Year stranded	2014

Notes

River was never observed stranded but the sunburn, now a white scar, on the left side of her body indicates she has spent time stranded.

Rivers **(Zone 5) Adult females**

Name	**Tom**
Sex	Female
Age	Sub-adult
Stranded	No

Name	**Squarecut**
Sex	Female
Age	Adult
Stranded	No

Notes

Squarecut's previous calf, Lindy, stranded in 2016 and was separated from her mother. Lindy was pushed into deeper water several times before being observed with Squarecut again. Unfortunately, Lindy died in February 2017.

All areas **(Zones 1, 2, 4 and 5) Males**

Name	**Zero-one**
Sex	Male
Age	Adult
Stranded	Yes
Years stranded	1990, 1997, 2018

Notes

Zero-one was freeze branded in 1990 when he was found stranded with nine other male dolphins in Lake Goegrup. Zero-one is mostly seen with Fourteen and Blake. Fourteen and Zero-one were stranded in a pool surrounded by sandbanks for three days at Herron Point in January 2018.

Name	**Fourteen**
Sex	Male
Age	Adult
Stranded	Yes
Years stranded	1994, 2018

Notes

Fourteen was freeze branded in 1994 when he stranded with three other males at Soldiers Cove. He is mostly seen with Zero-one and Blake. Fourteen and Zero-one were stranded at Herron Point for three days in January 2018. They escaped into deeper water without human intervention.

Name	**Blake**
Sex	Male
Age	Adult
Stranded	No

Notes

Blake is usually seen with Zero-One and Fourteen.

All areas **(Zones 1, 2, 4 and 5) Males**

Name **Bitts**
Sex Male
Age Adult
Stranded No
Notes
Bitts is usually seen with Frankenstein and Hook.

Name **Frankenstein**
Sex Male
Age Adult
Stranded No
Notes
Frankenstein is usually seen with Hook and Bitts.

Name **Hook**
Sex Male
Age Adult
Stranded No
Notes
Hook is usually seen with Frankenstein and Bitts.

All areas **(Zones 1, 2, 4 and 5) Males**

Name **Crook**
Sex Male
Age Adult
Stranded Yes
Year stranded 2009

Notes
Crook was never observed stranded but extensive sunburn, now white scarring, is evidence of him having spent time stranded in the sun. Crook's dorsal fin is very bent to the right making him look like a smaller individual. Crook is usually seen with Ruby, Trouble and Tooth.

Name **Ruby**
Sex Male
Age Adult
Stranded No

Notes
Ruby is usually seen with Crook, Trouble and Tooth.

Name **Tooth**
Sex Male
Age Adult
Stranded No

Notes
Tooth is usually seen with Crook, Trouble and Ruby.

All areas **(Zones 1, 2, 4 and 5) Males**

Name	**Trouble**
Sex	Male
Age	Adult
Stranded	Yes
Year stranded	2015

Notes

Trouble was found stranded with Squeaky in Black Lake. They were moved and released into deeper water. Squeaky disappeared from the estuary in 2016. Trouble is often seen with Crook, Tooth and Ruby.

Name	**Kristen**
Sex	Male
Age	Adult
Stranded	Yes
Year stranded	2017

Notes

Kristen was found at the southern end of the Harvey Estuary at Herron Point in a small pool surrounded by sandbanks. Kristen was successfully released into deeper water.

Name	**Scarry**
Sex	Male
Age	Sub-adult
Stranded	Yes
Year stranded	2012

Notes

Scarry was not found while stranded but was observed in the Peel Inlet with sunburn to the right side of his body in 2012.

All areas **(Zones 1, 2, 4 and 5) Males**

Name **Beaky**
Sex Male
Age Juvenile
Stranded No

Notes
Beaky is Topnotch's previous calf. His dorsal fin does not have many markings but he has a distinct deformed jaw.

All areas **(Zones 1, 2, 4 and 5) Females**

Name **Hayley**
Sex Female
Age Adult
Stranded Yes
Year stranded 2014

Notes
Hayley and her calf stranded in 2014 at the southern end of the Harvey Estuary. They were successfully moved into deeper waters after being spotted by an aircraft pilot who raised the alarm. Unfortunately, the calf was found deceased soon after. Hayley's current calf, Comet, was born in 2016.

Name **Diver**
Sex Female
Age Adult
Stranded No

Notes
Diver's calf, Scuba, was born in 2016.

Name **Mowgli**
Sex Female
Age Adult
Stranded No

Notes
Mowgli's calf, Cathy, was born in 2016.

All areas **(Zones 1, 2, 4 and 5) Females**

Name	**Lucy**
Sex	Female
Age	Adult
Stranded	Yes
Years stranded	2018

Notes

Lucy's calf, Luna, was born in 2016. Lucy and Luna have not been found stranded but were observed with sunburn in January 2018, indicating that they spent some time stranded.

Dawesville Cut **(Zone 3) Males**

Name **John Edwards**
Sex Male
Age Adult
Stranded No
Notes
John Edwards is usually seen with Jack Daniels and Jim Beam.

Name **Jack Daniels**
Sex Male
Age Adult
Stranded No
Notes
Jack Daniels is usually seen with John Edwards and Jim Beam.

Name **Jim Beam**
Sex Male
Age Adult
Stranded No
Notes
Jim Beam is usually seen with John Edwards and Jack Daniels.

Dawesville Cut **(Zone 3) Males**

Name **Sharkbite**
Sex Male
Age Adult
Stranded No

Notes
Sharkbite is usually seen with Saw, Moretto, Julian, Maxwell and Ryan. His name comes from a big shark bite scar on his back and the right side of his body.

Name **Saw**
Sex Male
Age Adult
Stranded No

Notes
Saw is usually seen with Sharkbite, Moretto, Julian, Maxwell and Ryan.

Name **Moretto**
Sex Male
Age Adult
Stranded No

Notes
Moretto is usually seen with Sharkbite, Saw, Julian, Maxwell and Ryan.

Dawesville Cut **(Zone 3) Males**

Name **Julian**
Sex Male
Age Adult
Stranded No

Notes
Julian is often seen with Maxwell, Moretto, Saw, Ryan and Sharkbite.

Name **Maxwell**
Sex Male
Age Adult
Stranded No

Notes
Maxwell is often seen with Julian, Ryan, Moretto, Saw and Sharkbite.

Name **Ryan**
Sex Male
Age Adult
Stranded No

Notes
Ryan is often seen with Sharkbite, Saw, Moretto, Julian and Maxwell.

Dawesville Cut **(Zone 3) Males**

Name	**Elly**
Sex	Male
Age	Adult
Stranded	No

Dawesville Cut **(Zone 3) Females**

Name **Laika**
Sex Female
Age Adult
Stranded No

Notes
Laika's calf, Sputnik, was thought to have been born in 2015. Sputnik is now independent but can still sometimes be seen with Laika.

Name **Joy**
Sex Female
Age Adult
Stranded No

Notes
Joy's calf, Huubster, was born in 2016. Unfortunately, Huubster has been missing since 2017.

Name **Dylan**
Sex Female
Age Adult
Stranded No

Notes
Dylan's calf, DC, was born early in 2018. DC was named after Doug Coughran, a senior wildlife officer (now retired) at the Department of Biodiversity, Conservation and Attractions. Doug has been involved in Mandurah dolphin strandings and entanglements for decades.

Dawesville Cut **(Zone 3) Females**

Name **Brandon**
Sex Female
Age Adult
Stranded No

Notes
Brandon has a calf, Hiccup, who was born in 2016.

Name **Lovis**
Sex Female
Age Adult
Stranded No

Notes
Lovis' calf, Ronja, is thought to have been born sometime in 2015 as they are still consistently seen together.

Name **Wild Turkey**
Sex Female
Age Sub-adult
Stranded No

Dawesville Cut **(Zone 3) Females**

Name	**Willow**
Sex	Female
Age	Sub-adult
Stranded	No

Dolphin behaviour

When observing dolphin behaviour it is important to distinguish between behavioural states and behavioural events. Dolphins are usually in one of four behavioural states: foraging, resting, socialising or travelling. Behavioural events occur within the behavioural states and are instantaneous, such as vocalisations, sudden movements or ingestion of prey. Each of the behavioural states and some commonly observed events are described below.

Foraging and feeding

Dolphins that are actively searching for prey like finfish, squid and octopus are said to be foraging. When dolphins are catching, processing and eating prey, they are said to be feeding. Generally, dolphins consume prey underwater. However, as dolphins cannot chew, they sometimes throw larger prey around the surface or drag it along the bottom to break it up into smaller pieces. In deep water, foraging dolphins are usually spread from each other (at least 10m apart), often milling and changing directions with every surfacing. You may see them surface for a few breaths, dive again for a few minutes, then surface again for a few breaths. We refer to this behaviour as **'mill forage'**.

Sometimes, when dolphins are in a hurry to get back underwater, you will see them surface for one quick breath, either by **leaping** or **porpoising** out of the water, or **rapidly surfacing** without their ventral side clearing the surface.

Foraging behaviour in shallow water often includes **fast swimming** and **'rooster tailing'** where streams of water come off the dorsal fin. This fast swim can turn into a hydroplane where most of the dolphin's body is visible above the water. Alternatively the fast swim can result in a shallow water **tail whack** with fish flying high in the air (see specific behaviours section).

Foraging and feeding

In the shallows of the Peel-Harvey Estuary we often see dolphins **bottom-grubbing**. This involves dolphins positioned vertically in the water column while poking the substrate (mud, sand, seagrass or seaweed) with their rostrum. After engaging in bottom grubbing, you can usually see the dolphin's rostrum and head, and sometimes even the dorsal fin, covered in mud.

Dolphins often travel along the edges of the shallow sandbanks or rivers while searching for fish and display a forage/travel behaviour combination. For example, dolphins often travel through marinas, canals and moorings stopping and engaging in mill forage for a little while, before moving on. In Mandurah it is common to see the dolphins herding and chasing fish along structures like canal walls.

Resting

Resting

Resting dolphins may be submerged for several minutes, and may surface pointed in another direction.

Dolphins that are engaged predominantly in a resting state are not actively foraging/feeding, travelling or socialising. In contrast to foraging dolphins, resting dolphins often form a tight group where individuals are within 2m of each other.

A resting group may move slowly, often without a clear direction. Resting dolphins often take multiple breaths at each surfacing and then dive within a few seconds of each other.

Resting dolphins may be submerged for several minutes, and may surface pointed in another direction.

Resting dolphins often **'snag'** at the surface for a few seconds, or even minutes. Snagging can be identified by a dolphin floating at the surface motionless with their fluke and often the majority of the dorsal fin beneath the water and the front part of their body exposed to the air. They look a little like sausages when they do this, hence the term.

Socialising

Socialising

Like humans, dolphins are very social animals who continuously interact with each other. Dolphins display a remarkable variety of social behaviour.

A socialising group is often a tight group of dolphins with a lot of body-to-body contact between individuals. Dolphins may rub their bellies together, or their belly against another dolphin. They may also stroke each other with their pectoral fins or nudge each other with their rostrum.

You may see leaps, porpoising, and/or fast swims while dolphins are chasing each other. You can also see calves socialising with each other while their mothers are foraging.

Not all social interactions between individuals are friendly. Some interactions, particularly among males, are antagonistic. The rake marks you see on many dolphins are caused by other dolphins' teeth as a result of unfriendly interactions.

Commonly observed behavioural events

Fast swim

Dolphins swimming at faster than normal cruising speeds. Dolphins may swim fast when chasing fish, socialising and chasing each other. You may see a spray of water come off the dolphin.

Leap

The entire body of the dolphin clears the water. Leaps may occur when dolphins are foraging (i.e. a quick breath so they can get back underwater rapidly) or when they are socialising.

Rooster tail

A fast swim along the surface in which a sheet of water trails off the dorsal fin. Typically observed in the shallows when dolphins are foraging.

Shallow water tail whack

A dolphin stops abruptly at or under the surface and wheels, swinging its fluke sharply. May be indicated by observing fish being knocked into the air. Tail-whack is often observed following a rooster tail.

Dolphins chasing fish

To record dolphins chasing fish, you must observe the fish being pursued. Dolphins regularly chase fish along the canal walls and other structures and often the fish can be seen jumping out of the water. When snacking, a dolphin swims belly-up near the surface chasing after small fish.

Dolphins with fish

Dolphins observed with fish (including cephalopods like squid and octopus) in their rostrum. Sometimes dolphins toss fish up in the air or repeatedly on the surface to immobilise or break their prey into smaller pieces. The most typical fish that dolphins are observed to toss in the Peel-Harvey are the estuary catfish. Once a resident dolphin was observed tossing a catfish 29 times in a row.

Snagging

Dolphins hanging motionless at the surface with their tail beneath the water and the front half of their body at the surface. They look like sausages when doing it, hence the term 'snagging'. Dolphins may turn their head from side to side to scan the water. Snagging most often occurs during resting bouts but may occur during pauses in other activities.

Baby position

Calves travelling just behind and to one side of their mother. When a calf surfaces in baby position (BP), its head surfaces near the mother's midsection. Travelling in BP provides a small hydrodynamic benefit for the calf and also easy access to the mammary slits for feeding. Young calves generally spend a lot of time in BP. As they grow older, they gradually spend less time in BP and venture further away from their mother until eventually they are fully weaned. In the Peel-Harvey waterways calves are weaned at approximately three years of age and are often observed in BP with juveniles and other adults who are not their mother. The best way to confirm BP (mother and calf) is to see if the calf is substantially smaller than the mother and whether the calf maintains BP for several surfacings.

Weed rub

A dolphin approaches a patch of weed and rubs into it. Most often Peel-Harvey dolphins are observed swimming with the patch of weed draped around their dorsal fin or moving it across their back, over the dorsal fin toward the tail with which they lift it out of the water. A dolphin engaging in a weed rub can be easily mixed up with an entangled dolphin. Therefore it is important to observe a dolphin with weed for a few surfacings to ensure the weed is gone and the dolphin is not entangled.

Body-to-body contact

Obvious social interaction between dolphins usually involves body-to-body contact. You will often see splashes, fast swims or leaps by dolphins interacting with each other. Socialising often occurs in tight groups.

Cobbler tossing

Many encounters with the estuary dolphins involve observations of them pursuing, catching and consuming fish and occasionally even octopus. Small fish, like garfish, are caught with rapid chases, sometimes the dolphin swimming belly-up while the fish tries to escape at the surface. Salmon is pursued against rock walls, mullet chased in the shallows and often stunned with an impressive tail whack, while an octopus gets tossed in the air.

The most common fish seen tossed up in the air by the Peel-Harvey dolphins is the estuary catfish, also known as cobbler. Dolphins feed on cobbler year-round both in estuarine and coastal waters, although our observations in the Peel-Harvey have mainly been in late spring.

Cobbler are bottom dwelling, scaleless fish that have venomous spines on their dorsal and pectoral fins. It is thought that dolphins toss cobbler to disable the use of these spines as defence, making it safer and easier to swallow. Usually cobbler get tossed anywhere between one and eight times before being consumed, or sometimes let go. However, on one occasion a dolphin called River tossed her catch 29 times within three minutes before consuming it. Another dolphin called Crook takes second place with 22 tosses.

Halo's story

Use this QR code to listen to Halo's story.

Halo, Hatrick's calf, was entangled in rope in May 2016. Department of Biodiversity, Conservation and Attractions senior wildlife officer Doug Coughran managed to free Halo from the entanglement. Today Halo is a healthy and lively calf who is still seen with his mother, Hatrick.

Unfortunately, Halo's entanglement is not an isolated incident but something that we see and hear about frequently when working with dolphins. Entanglements can lead to starvation, amputation of fins or flukes and eventually an agonising death.

We can reduce the number of wildlife entanglements by safely disposing of our fishing line and other waste.

Wildcare HELPLINE 9474 9055

If you see dolphins or other wildlife in distress, call DBCA's WILDCARE Helpline on (08) 9474 9055. The Helpline provides 24-hour state-wide referral for anyone who finds sick or injured native wildlife in Western Australia and is seeking advice on what to do and where to find care for the animal.

Glossary

Calf – a dolphin still dependent on its mother, usually less than five years old. The dolphins in the Peel-Harvey waterways usually become independent at three years old.

Juvenile – a young, immature dolphin, usually between four and 10 years old.

Sub-adult – a dolphin that is not quite adult-size but larger than a juvenile.

Adult – a mature, fully grown dolphin.

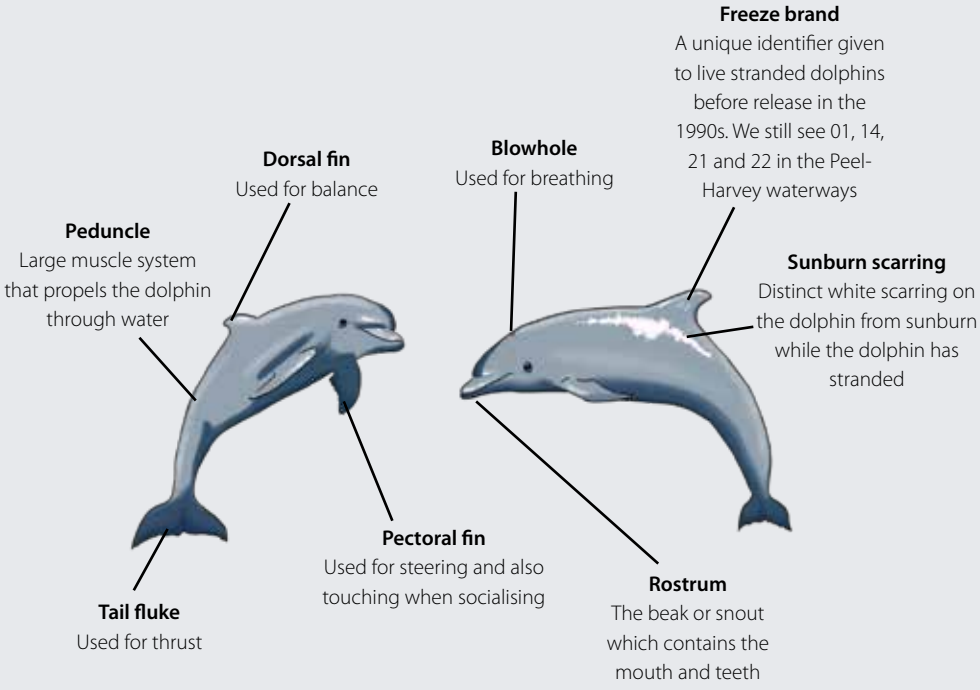
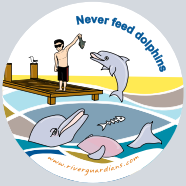


Illustration Gabrielle Goodchild

Be Dolphin Wise

It's easy to help care for dolphins in the Riverpark 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 can leave them vulnerable to entanglement from fishing line, boat strikes and disease, and is illegal.

* 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 – young dolphins need to stay close to their mother for protection, feeding and assistance with breathing. Keep clear of mothers and calves so they are not separated.

This project is supported by Peel-Harvey Catchment Council through funding from the Australian Government's National Landcare Program, the Western Australian Government's State NRM Program supported by Royalties for Regions and John Tonkin College.

Thank you to the following groups for the collaborative effort required to launch Dolphin Watch in Mandurah and produce the second edition of *FinBook Mandurah*.

Australian Government | National Landcare Program

Estuary Guardians Peel-Harvey

JTC John Tonkin College Mandurah Western Australia Excellence • Respect • Commitment

Murdoch University

PHCC Working Together Peel-Harvey Catchment Council

Government of Western Australia

Department of **Biodiversity, Conservation and Attractions**
State Natural Resource Management Program

Mandurah Cruises

City of Mandurah

Mandurah Volunteer Dolphin Rescue Group

Contact us
Estuary Guardians
Web: estuaryguardians.com
Email: estuaryguardians@gmail.com
Facebook: @estuaryguardians

20180016 0318 500

Information current as at March 2018.
This publication is available in alternative formats on request.