# **Dolphin Watch Annual Report 2015–16**













## Preface



The *Dolphin Watch* project is a partnership between the Department of Parks and Wildlife's *River Guardians* program and Murdoch and Curtin universities. It was instigated to learn more about the community of bottlenose dolphins residing in the Swan Canning Riverpark.

It was developed as a citizen science and education project where volunteers share vital information with scientists so they can learn more about the dolphins and their behaviour.

More than 1000 people have been trained as citizen scientists since the project began and active volunteers have produced almost 21,000 reports. These reports have increased knowledge and continue to inform current research.

The current *FinBook* is the sixth edition and has two new

categories 'Visitors of the Year' to help researchers track down infrequent visitors to the Riverpark and, 'Wanted dolphins' dolphins that are of particular interest to scientists.

In 2015–16, three non-resident dolphins visited the Riverpark–an adult female who inhabits nearby waters, a juvenile who previously visited the Riverpark with his mother but now explores on his own, and a juvenile who was first seen in the Riverpark in 2016.

We simply would not be able to add to the growing knowledge of the resident Riverpark dolphins without volunteers providing records of sightings and detailed data to our researchers. Thank you to our Dolphin Watchers for their contribution as citizen scientists, the dedicated staff at Parks and Wildlife and our university partners for continuing the great work on this collaborative citizen science project.

Jim Sharp Director General Department of Parks and Wildlife



Photo - Sue Harper

## Foreword



Dolphin Watch is a project run under the River Guardians program and is celebrating seven years of citizen science. Thank you to each and every volunteer who has provided scientists with citizen science data this year.

A huge thank you to Delphine Chabanne from Murdoch University, Sarah Marley from Curtin University and Dr Kerry Trayler from Parks and Wildlife who helped train more new volunteers this year taking our tally of trained and registered volunteers to 1034.

Version 2 of the *Dolphin Watch* smartphone application (app) is being designed by Gaia Resources using feedback from our volunteers and will give others the opportunity to use it around Western Australia. More opportunities to learn how to use the app with the experts will be offered to volunteers in 2017.

*Junior Dolphin Watch* continues the great work of engaging youth to learn about the rivers, the dolphins and how to conserve them. I'd like to thank Linley Brown for her great work as *Junior Dolphin Watch* coordinator and wish her well in her new endeavours.

Volunteers contributed 1558 hours this year, equivalent to 207 days of full-time work. *Dolphin Watch* volunteers have contributed 20,217 reports since the start of the project in 2009, including 2295 reports this year alone, a fantastic effort by our active volunteers.

As always, we would like to acknowledge Jennie Hunt and Robert Broadway, our *Dolphin Watch* team volunteers that assist us with data collection and collation. Jennie and Bob have worked tirelessly to work on new data collection systems this year. Jennie continues to provide assistance with project data and liaising with volunteers when they need assistance.

Thanks to Dr Chandra Salgado-Kent from Curtin University's Centre for Marine Science and Technology (CMST) for her support and data crunching to find out what Dolphin Watchers have discovered. Thank you to Lars Bejder from Murdoch University's Cetacean Research Unit (MUCRU) for his support. Thanks to Jason, Rachel, Lee, Lorene and Sonia from our newly formed Volunteers and Community Unit at Parks and Wildlife for their support and assistance with the project. I would like to especially thank Rachel Hutton who continues to organise fantastic events, training, publications and hosts the *River Guardians* social media platforms to keep you all up to speed. And finally a huge thanks to Doug Coughran, senior wildlife officer, marine wildlife operations who retired from Parks and Wildlife this year. Doug provided guidance, advice and direction for the *Dolphin Watch project*, especially throughout dolphin incidents such as entanglements. We wish you all the best Doug and thank you for your continued support and encouragement.

We look forward to a fantastic new year and if you haven't been out lately, I'd encourage you to get out there by the rivers and submit your observations. Let's see what exciting things we can discover this year!

Marnie Giroud Community program coordinator Volunteers and Community Unit Department of Parks and Wildlife

## *Dolphin Watch* Annual Report 2015–16

### Contents

Preface	
Foreword	
Message from Dolphin Watch Patron Professor Lyn Beazley	1
Dolphin Watch scientists and staff	(
Junior Dolphin Watch	
Monitoring dolphins	ł
FinBook	ł
Dolphin Watch smartphone app	(
Dolphin research in the Riverpark	(
Research findings 2015–16	1
Dolphin Watch award winners	14
Dolphin Watch volunteer profile	1



Photo – Sue Harper



# Message from *Dolphin Watch* Patron

### **Professor Lyn Beazley**

I am so honoured and delighted to continue as Patron of *Dolphin Watch*. It is now some seven years (I can hardly believe it!) since we showed very real innovation by establishing *Dolphin Watch*.

With a totally professional and dedicated team, and an amazing and ever growing cohort of brilliant volunteers, we now have a program that I am sure is a shining light around the globe. I think we should all be particularly proud that we have embraced the world of apps and that we have developed *Junior Dolphin Watch*.

In August this year, I was delighted to attend an event in Mandurah organised by students of John Tonkin College. The event included a cruise during which the students saw numerous dolphins.

It was an exciting learning experience with some young people seeing dolphins for the first time; I am sure that the trip will be long remembered by all. In the evening, I spoke at a dinner, again organised by the students, that was attended by members of the *Dolphin Watch* team along with members of the community including local dignitaries.

Working with the *Dolphin Watch team*, a Fin Guide for the Peel-Harvey Estuary dolphins has been developed and the dinner was the perfect event at which to launch it. In addition, the students announced a program to provide waste bins especially for discarded fishing line to help minimise entanglements.

How wonderful to see that news of your achievements is spreading and that your success is inspiring young people to develop their own programs to protect our dolphin populations and well as instilling leadership amongst the next generation.

I congratulate every one of you for being part of *Dolphin Watch* – we are heading for icon status!

So let's look forward to what I am sure will be another successful year as *Dolphin Watch* continues to set the standard, monitor and protect our precious dolphin populations and provide inspiration to others.

#### Professor Lyn Beazley AO FTSE



Photo – Sue Harper

# **Dolphin Watch staff and scientists**

**Professor Lyn Beazley** *Dolphin Watch* Patron, Chief Scientist of Western Australia 2006–2013

**Dr Kerry Trayler**, Principal scientist Rivers and Estuaries Division, Parks and Wildlife

**Douglas Coughran AM**, Senior wildlife officer, Marine Wildlife Operations Science and Conservation Division, Parks and Wildlife

Jason Menzies, Manager, Volunteers and Community Unit, Parks and Wildlife

Marnie Giroud, Community program coordinator, Volunteers and Community Unit, Parks and Wildlife

Rachel Hutton, Community project officer, Volunteers and Community Unit Parks and Wildlife

Linley Brown, Education officer and *Junior Dolphin Watch* coordinator, Parks and Wildlife

**Professor Lars Bejder**, Murdoch University Cetacean Research Unit (MUCRU), Research Leader

Dr Nahiid Stephens, Murdoch University Lecturer/Researcher

**Delphine Chabanne**, Murdoch University– Research Scientist and PhD candidate

**Dr Chandra Salgado-Kent**, Curtin University's Centre for Marine Science and Technology (CMST), Deputy Director

Sarah Marley, Curtin University, Researcher and PhD candidate

Jennie Hunt, Dolphin Watch data volunteer

Robert Broadway, Dolphin Watch data volunteer

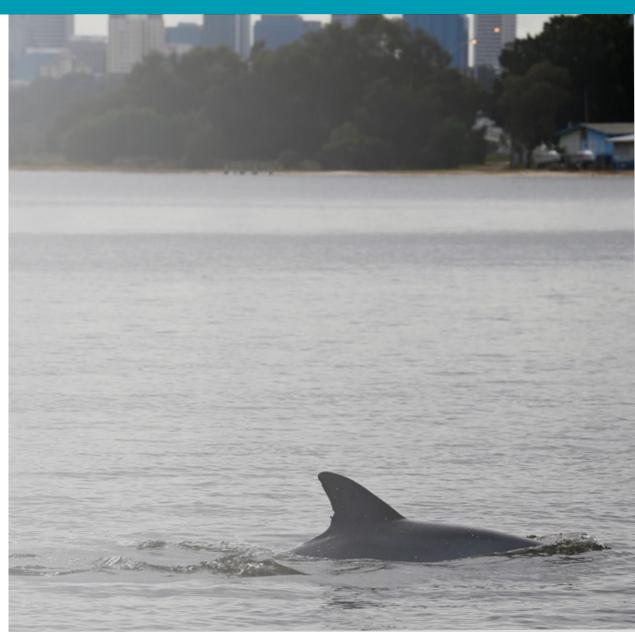


Photo - Sue Harper

# **Junior Dolphin Watch**

*Junior Dolphin Watch* was launched for schools in 2014 and has continued to grow at an amazing rate.

During the 2015–16 financial year, 800 students from 11 schools engaged in *Junior Dolphin Watch*. Participants ranged from Year 3 to Year 12.

Activities and excursions are adapted to suit the needs of the teacher, but always include the key themes on how to care for our dolphins and the rivers they call home. All students learn how to identify individual dolphins, recognise dolphin behaviours, how to be RiverWise and learn about the importance of citizen science.

Some of the Junior Dolphin Watch activities delivered during the past year included a dolphin watching cruise with Iona Presbyterian College, river clean-ups and dolphin watching with River Ranger cadets. Dolphin lessons were also a part of the 2016 Earth Expo Day held at the Canning River Eco Education Centre.

A dolphin naming competition was held for our *Junior Dolphin Watchers*. The winning name 'Echo' was chosen by Year 1 students from Penrhos College.

Teachers that engage in the program continue to be provided with free *Junior Dolphin Watch* incursions, national curriculum linked teacher resources, loan of the *Junior Dolphin Watch* kit box of resources and on-going support from the *Dolphin Watch* team including scientists and educators.



Penrhos College students with Linley Brown and a picture of Echo. Photo - Miranda Jackson/Parks and Wildlife

# **Monitoring dolphins**

With seven years of dolphin monitoring under our belt, the *Dolphin Watch* project is helping us to learn more about our resident community of Indo-Pacific bottlenose dolphins. Check out the research section in this report to see what we have discovered together!

This year we made some significant changes to the administration of the project, including a huge data integration project with Gaia Resources to help streamline web and app based observations into one system. Thanks to our volunteers for their patience during this process and especially to our *Dolphin Watch* data volunteers Jennie Hunt and Bob Broadway who made significant changes to their processes when vetting and inputting reports.

This year we offered two app training sessions for volunteers to help make monitoring dolphins easier. These two-hour sessions by the river allowed volunteers to get help from the experts in using the app and problem solving any issues they were having. It was also a great opportunity for volunteers to chat to each other about their experiences. We look forward to offering these sessions again following the excellent feedback we received from volunteers on their usefulness.

### **FinBook**

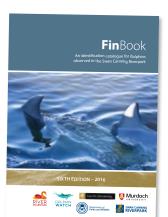
Murdoch University researcher and PhD candidate Delphine Chabanne has once again created another fantastic edition of *FinBook*, our annual guide to the Indo-Pacific bottlenose dolphins (*Tursiops aduncus*) inhabiting the Swan Canning Riverpark.

The guide provides a way for community to learn more about the resident dolphins that inhabit the Swan Canning Riverpark. *FinBook* also helps *Dolphin Watch* volunteers to keep up with who is who in the dolphin community when observing the dolphins.

*FinBook* is divided into sections according to the dolphins' age, sex and the most recent observations of individual dolphins in the Riverpark. Each section is subdivided according to the level of associations between dolphins as well as their distribution in the Riverpark. Each dolphin has a profile that provides:

- the dolphin's name
- images of the left and right side of the dolphin's dorsal fin
- the dolphin's age-class (adult/juvenile/calf)
- the dolphin's known or suspected sex
- for adult females, name of previous calves
- for juveniles, name of mother.

This edition has two new categories in the book, 'Visitors of the year' and 'Wanted dolphins', to help researchers track down infrequent visitors to the rivers and dolphins that are of particular interest to the scientists. Delphine has also



written this year's dolphin story describing her discoveries about one of our dolphins, Soul.

The 'dolphin behavioural guide' features again in the latest edition of *FinBook* and provides a great reference for volunteers and community, to understand what they are seeing when observing dolphins in the Riverpark.

*FinBook* is available to download for free from the *River Guardians* website – <u>www.riverguardians.com</u>.

### Dolphin Watch smartphone app

In March 2014, the *Dolphin Watch* smartphone application (app) was released for iPhone and Android platforms, providing a mobile option for *Dolphin Watch* volunteers in addition to the existing web monitoring form. The app was designed to provide a simple and environmentally friendly monitoring process for volunteers to log their sightings in the field.

In its first full financial year of operation (2014–15), 38 volunteers used the app to report 156 valid observations (79 absence records and 77 where one or more dolphins were seen). Approximately 246 dolphin sightings were made.

In the 2015–16 financial year, a smaller group of 28 volunteers used the app to report almost double the previous year's valid observations–292. While there were many more (174) absence records than sightings (118) of one or more dolphins, approximately 378 dolphin sightings were made.

Including absence data in volunteer observations helps researchers understand where high concentrations of dolphins are occurring, rather than just relying on sightings.

The technology team behind the app (Gaia Resources) worked with staff and volunteers at volunteer training and the App Up/ Clean Up field events to ensure the app continues to benefit volunteers. Gaia Resources also provide a helpdesk service to volunteers and has released a number of small app upgrades since its release.

Most recently, a data integration project has brought all historical digital data (from the website and app) into a single database platform that now aggregates reports from all sources in real time and allows the *River Guardians* team to better curate and administer this significant dataset.

Work is also underway with the *River Guardians* team and university researchers to design a completely reworked version of the app that will better-meet the research data needs and make the user experience even easier and more engaging.

The Dolphin Watch smartphone app is available from the Google Play and iTunes stores for free.



#### Delphine Chabanne – Research scientist and PhD candidate -Murdoch University

Murdoch University PhD student Delphine Chabanne has been busy collecting data in the Swan Canning Riverpark and adjacent waters since June 2011. After four years of intense fieldwork, Delphine has spent the last 12 months on data processing, analysis and discussing the results.

Delphine has continued monthly, boat-based monitoring of the dolphins and follows a systematic route from the Inner Harbour of the Port of Fremantle upriver to the Causeway Bridge near the Perth CBD and to the entrance of the Canning River by the South of Perth Yacht Club.

In 2015–16, Delphine recorded 37 dolphins in the Swan Canning Riverpark, although two of them died–Gizmo in October 2015 and Pirulli in May 2016. The Riverpark is home to eight resident calves including three who were born early 2016. Among the adult dolphins (i.e. 27 individuals still alive), three individuals were not known as 'residents' in the Riverpark: Scarlett, an adult female who inhabits the adjacent waters (Owen Anchorage); Hugs, a juvenile who previously visited the Riverpark with its mother but now explores on its own; and Mystery, a juvenile who was first observed in the Riverpark by *Dolphin Watchers* in early 2016.

Within the Riverpark, resident dolphins are not randomly distributed. Some will most likely be observed in the lower reaches of the estuary and the Inner Harbour of the Port of Fremantle (e.g. Eden and Wild with their respective calves), others will spend more time in the upper reaches of the estuary and the Swan and Canning rivers (e.g. Highnitch and Daniele and their respective calves).

### The resident dolphins

Based on behaviour, photo-identification and genetic data obtained from 2011 to 2015, Delphine has had some very interesting results. All the residents, except the calves and Soul (Pirulli's previous calf) who recently underwent a biopsy, have had their gender identified (see *FinBook* version 6). The proportion of adult males and females within the residents is close to 1:1. However, current juveniles are mainly males (e.g. Night, Zari and Garden). The last two years (2015 and 2016) have been very successful with six births and the oldest calf, Nala (Akuna's calf), is now two years old.

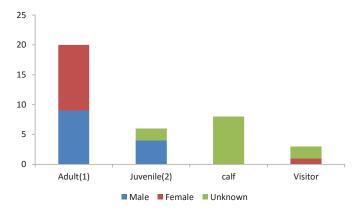


Figure 1: Resident and visitor dolphins observed in the Riverpark from June 2015 until August 2016, per sex-age classes. (1) One adult died in May 2016; (2) one juvenile died in October 2015.

The resident dolphins in the Riverpark have a fission-fusion society, i.e. some dolphins will stay together for a long period of time and others will have shorter associations such as males with females. Males tend to associate in small groups of two to three individuals, and in most cases they will stay together for many years. For example, Hii and Bottomslice have been seen together for many years. Females, however, tend to associate with others who have a calf of the same age and change associations over the years. This year, for example, Tupac has often been seen with Eden and Wild, all with their respective calves who are about six months old. To identify which dolphins most commonly associate together a dendrogram such as represented in Figure 2 is used. The dendrogram, also known as a tree-diagram, indicates the strength of associations between hierarchically formed clusters of individuals. Individuals are arranged on one axis and their degree of association on the other varying from 0 (i.e. weak association) to 1 (i.e. strong association).

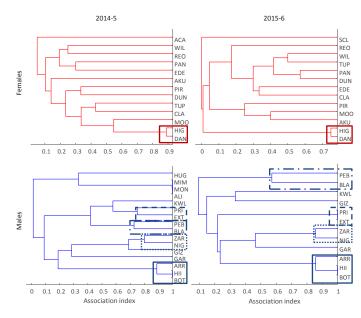


Figure 2: Dendrogram showing Association Indices between female (red) and male (blue) individuals seen from 2014–15 (left) and 2015–16 (right) in the Swan Canning Riverpark. Individuals are represented by a three letter code on the right of the figures. Association index varies from 0 to 1, in which the higher the index is, the more associated two individuals are. Calves are not represented in the dendrogram because of their dependence on their mother. Boxes represent pairs or trios of individuals that showed similar strength of associations between 2014–15 and 2015–16.

Although there is a strong social life within residents, Delphine has found evidence that the resident dolphins are not isolated to other adjacent populations of dolphins. First of all, resident dolphins interact with adjacent populations of dolphins when the latter visited the Riverpark or when the residents travel to the adjacent coastal waters. Delphine also used genetic material to understand the link between the residents and the adjacent populations of dolphins. Since 2013, Delphine has been conducting some biopsy sampling to obtain a tiny piece of skin of as many dolphins as possible. The samples were sent to the University of Sunshine Coast in Queensland who extracted the DNA of each sample and analysed sequences of microsatellites and mitochondrial DNA. The preliminary results indicated that there is very limited genetic differentiation between the residents and adjacent populations.



Eden's calf surfacing. Photo – Delphine Chabanne/Murdoch University

#### Sarah Marley – Research scientist and PhD candidate– Curtin University

In January 2017, Sarah Marley submitted her PhD thesis "Behavioural and acoustical responses of coastal dolphins to noisy environments" to Curtin University. Many human activities produce underwater noise, such as vessel traffic, dredging, pile-driving, and construction works. This is of concern to acoustically-specialised animals such as dolphins that rely on sound to communicate, find food, and navigate around their environment. Sarah's research aimed to describe the Swan River underwater soundscape and examine how man-made noise may impact dolphins.

Sarah first began her work on the Swan River dolphin community in 2012, when she used a theodolite to track the movements and behaviour of dolphins in the Fremantle Inner Harbour. Since then, Sarah has expanded her theodolite tracking to a second site in Kings Park (overlooking Perth waters), and also used several acoustic recorders to monitor underwater sounds in the Swan River. This allowed her to study the acoustic environment experienced by dolphins beneath the surface, while also monitoring their behaviour at the surface.

These acoustic datasets revealed that the Swan River is composed of multiple acoustic habitats, each with its own characteristic soundscape and patterns in underwater noise. Some sites appear to be 'noisier' than others, with vessel traffic being the most widespread contributor of man-made underwater noise throughout the river system. This sound source has the potential to disrupt dolphin communication by masking whistles. Theodolite observations from Perth waters and the Fremantle inner harbour suggest that dolphins use these sites differently. Animals occupied the Fremantle Inner Harbour more frequently and for longer periods than Perth waters, despite heavier vessel traffic at the former site. Fine-scale behavioural observations of the dolphins at Fremantle Inner Harbour indicated that, despite remaining present in the harbour during busy periods, dolphins displayed responses to vessel traffic and associated underwater noise at this site. At high vessel densities, significant alterations to dolphin movement speeds and activity states occurred. In addition characteristics of dolphin whistles varied with increasing levels of underwater noise. Further research is required to assess whether this was in response to noise conditions or associated with dolphin groups and their behaviours. Responses to underwater noise may be strategies to help dolphins cope with life in a busy, noisy environment.

Sarah's thesis has now been sent off for examination. While this process is underway, she is busy preparing her findings for publication in scientific journals. But more importantly, after several months spent writing-up indoors, Sarah is looking forward to the opportunity to get back out in the Riverpark and spot some dolphins!

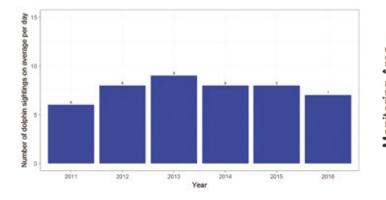


Sarah Marley in red, Curtin volunteer Ana Costa on the theodolite, Curtin volunteer Mariana Barbosa on the computer, and Rebecca James from Fremantle Ports in yellow. Photo – Jeanette Murray/Fremantle Ports

## **Dolphin Watch research findings 2015–16**

Dr Chandra Salgado-Kent – Deputy Director of the Centre for Marine Science and Technology (CMST) – Curtin University

The average number of dolphin sightings in the Riverpark dolphin community continues to remain stable with between six and nine sightings per day over the last six years (shown in Figure 3 below).



## Figure 3: Average number of dolphin sightings per day for each year since 2011.

Over the years, the number of dolphins sighted per hour of effort has remained consistently high in the Fremantle inner harbour (monitoring zone 31; right panel in Figure 4). The consistency of this pattern is evident when comparing the years of observations corrected for effort (shown in Figure 5). Relatively high number of sightings per hour of search effort is also consistently observed in Melville Waters towards the Narrows Bridge (zones 20 and 21) and at the entrance of the Canning River (zone 1).

In contrast, zones in the upper reaches (zone 14 and upriver) have had relatively few sightings over the years. Zones 18 and 19 are associated with fewer hours spent searching.

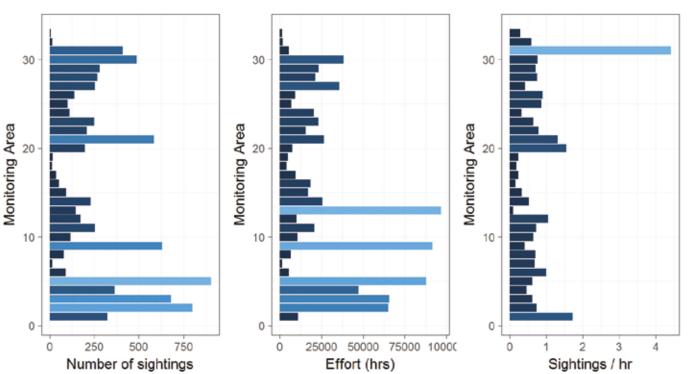
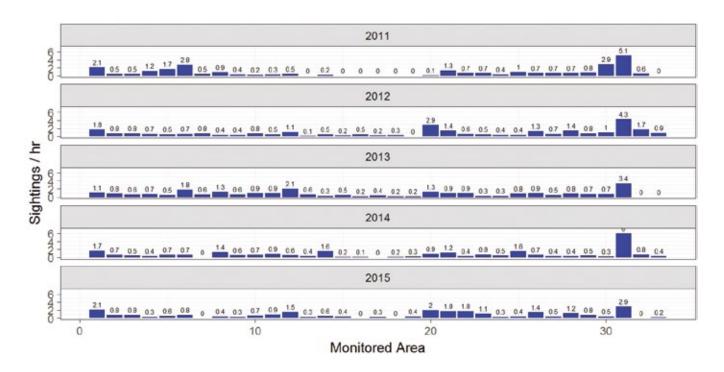


Figure 4: Number of dolphin sightings (left panel), effort searching by Dolphin Watch members (in hours; middle panel), and dolphin sightings per hour of search effort (right panel) within the different monitoring zones (observations for all years between 2011 and 2015 included).



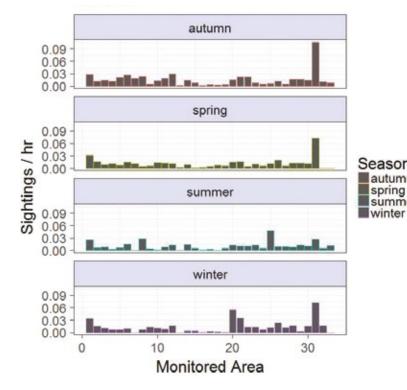
#### Figure 5: Average number of dolphin sightings per hour of search effort across monitoring areas during the years 2011 to 2015.

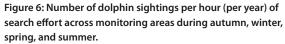
At locations identified as high-use areas by *Dolphin Watch* members, foraging and socialising are seen frequently. Other locations are used for these activities, but are often used heavily for transit from one high-use area to another. Variability observed among years in the use of different areas is most likely related to changes in the prey distribution.

The use of these hotspots changes with season. Dolphins shift the amount of time or frequency of use of high-use areas within the Swan Canning Riverpark each season (Figure 5 and Figure 6). For example, dolphins use the Fremantle inner harbour (zone 31) heavily in autumn, winter and spring, but decrease time spent there in summer (Figure 6). Melville Water near the Narrows Bridge is a high-use area by dolphins mainly in autumn and winter. In contrast, the entrance to Canning River (zone 1) is used relatively consistently throughout the year.

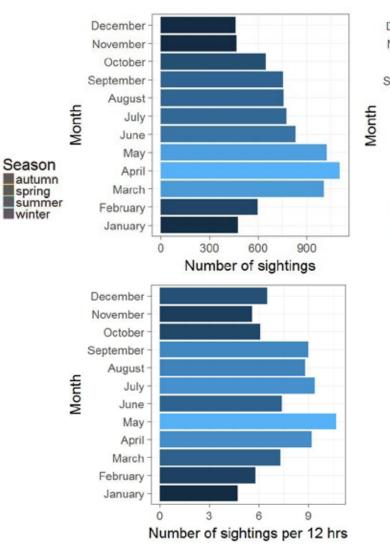


Photo – Sue Harper





Overall, dolphins have been sighted consistently most often per hour search effort in winter months and least often in summer months (Figure 7). Determining whether dolphins are spending more time within the Swan Canning Riverpark during months leading up to winter, during winter, and just coming out of winter than in summer months requires further research.



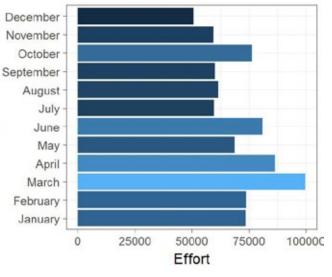


Figure 7: Number of dolphin sightings (left panel), effort searching by Dolphin Watch members (in hours; middle panel), and dolphin sightings per hour of search effort (right panel) during the different months of the year (all years between 2011 and 2015 included).

# **Dolphin Watch award winners**

### 2016 Dolphin Watch Photographer Award



Parks and Wildlife Director General Jim Sharp and Paige Myles. Photo–Mark Thornley/Parks and Wildlife

### **PAIGE MYLES**

### Awarded to the volunteer who contributed an outstanding dolphin photo

Working on one of the largest boats on the river, Paige often observes dolphins riding the bow wave. The crew of the vessel also assists her by radioing when they see them, so Paige can take photos and observe their activity. Paige observes dolphins mainly at the traffic bridges and has seen them swimming in circles just before getting ready to join the boat and ride the bow wave. She is sure the dolphins know she is watching them as they ride on their side looking at her watching them. Paige gets to see the dolphins from a unique perspective on a regular basis, which has allowed her to obtain some stunning photographs over the past year.

#### 2016 Dolphin Watcher Award



Joan Munro. Photo–Mark Thornley/Parks and Wildlife

### **JOAN MUNRO**

### Awarded to the volunteer who contributed the most amount of monitoring time

The winner, for the third year in a row, is Joan Munro. Joan and her husband care for the environment in many ways including volunteering to rehabilitate areas and dolphin watching. Joan has been volunteering for the *Dolphin Watch* project for more than four years and has spent a staggering 369 hours volunteering her observations and reports for the project this year – 91 hours more than she submitted last year, a truly outstanding effort.

### 2016 Citizen Scientist Award



Professor Lyn Beazley and Paige Myles. Photo-Mark Thornley/Parks and Wildlife

### **PAIGE MYLES**

Awarded to the volunteer who contributed excellent citizen scientist observations of dolphins and their surroundings

Paige Myles has won this award for her excellent observations and detailed descriptions of key information including her comments on absence of dolphins. Paige decided to join *Dolphin Watch* when *FinBook* was recommended to her by staff at Royal Perth Yacht Club and she has been an active volunteer for several years now. Paige never gets sick of seeing the dolphins, and recalls her favourite observation this year of Tupac teaching her new calf how to ride the bow wave of a boat. Paige's love for nature inspires her to keep participating. She enjoys seeing how the dolphins change and interact, and recognises the importance of the information she provides which helps scientists learn more about the dolphins.

# **Dolphin Watch volunteer profile**

### Sue Harper – Dolphin Watch volunteer



Sue Harper at *Dolphin Watch* Day. Photo–Mark Thornley/Parks and Wildlife

As a child growing up in the pretty countryside of the southwest of England, I always loved nature and wildlife from a young age. I could not have imagined then that I would settle in beautiful Perth, Western Australia with its exotic flora and fauna, and where there are dolphins on your doorstep! I'd always get excited to see dolphins while walking the dog along the river, so when I saw an article in the West Australian newspaper about the *Dolphin Watch* project in 2010, I thought it was the perfect volunteering opportunity for me to learn more about our dolphins and help protect them.

I was excited to attend my first *Dolphin Watch* training session six years ago, get the shirt and hat, and most importantly be able to send in my observations and contribute to the valuable research being done. Since then, I've sent in many reports and now also use the app which makes it so easy to record data on the spot. I always carry my camera when I'm by the river as you never know when the dolphins will appear, sometimes right in front of you. Once I saw a dolphin jumping metres out of the water four times in a row near Canning Bridge! Over the years, I've been lucky enough to see much behaviour: dolphins tail slapping under Mt Henry Bridge; the frenetic activity of dolphins chasing fish and vying with pelicans, terns and cormorants to get the best catch; and perhaps best of all, to see new generations of calves appear with their mothers in the Riverpark.

With the help of *FinBook*, it's always fascinating to take a close look at my photos and get a reliable dolphin ID. I've got pretty good at spotting some individuals from a distance with their distinct dorsal fin markings like Akuna, Hii and Bottomslice. If dolphins are around, people love to stop, watch and chat, so I will point out the individuals if I can and swap information. As a keen conservationist living in lovely Mount Pleasant my volunteering now includes emptying the fishing line bins at Deepwater Point and Mount Henry Bridge as well as picking up rubbish around the river; not the most glamorous of jobs but necessary as it's heartbreaking to see the avoidable damage done to our wildlife from entanglements. That said, it's always heartwarming to meet so many people who don't take the river for granted, and really value this amazing eco-system and its wildlife.

It was an honour to be rewarded for my volunteering efforts for the project with the 2013 *Dolphin Watch* Photographer Award, and then in 2014 and 2015 to receive the Citizen Scientist Award. I can't speak highly enough of the friendly, engaging and committed *Dolphin Watch* team as well as the researchers from Curtin and Murdoch universities who are experts in their fields. Their enthusiasm is infectious, and has resulted in a highly successful and very special citizen science project, which also provides fun and interesting workshops and excursions for its volunteers. I would encourage anyone who loves dolphins and enjoys the Riverpark to become involved – it's been such a rewarding experience for me, and I am very happy to continue to play a small part in ensuring the survival and well-being of these wonderful creatures.



Photo – Sue Harper

