

Our Remarkable Bay



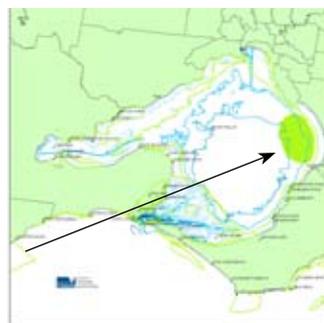
Something truly remarkable is happening in eastern Port Phillip.

We know that in 2006 Esther and her community of common dolphins came into the bay and stayed in the broad Mornington area. Nowhere else in the world have these normally oceanic dolphins taken to living in such shallow water and so close to shore. Esther is mum to at least two calves.

Just to the north of our special dolphins, according to DSE scientists, is a larval hot-spot that acts as the basis for a rich food chain in eastern Port Phillip.

This is like a “planktonic oasis” comprising the

larvae of fish, crustacea and molluscs that support huge schools of baitfish which in turn are relied on by larger fish, birds, seals and dolphins.



(Map courtesy of DSE)

Sue Mason’s PhD study, in part, seeks to understand if there is a connection between the common dolphins’ range and the hot-spot.

She is also investigating the threats to this small dolphin community from vessels and noise in this very busy location. Sue’s surveys will cover many thousands of square kilometres. (See page 3 for more information)



The whole region is subject to inflows from Mordialloc Creek, Patterson River, Kananook Creek, dozens of drains and smaller creeks. Pollution following summer rains closed many beaches in this area to human swimming.

Much more than an inconvenience to us, this pollution threatens all parts of the food chain and is an issue for our dolphins as they are subject to the same pathogens that affect us.

This is why we put so much effort into our catchment education programs.

WHAT’S ON at DRI

Ritchies Community Benefit Card - an easy way to help DRI. Get your free CB card from any Ritchies Store, and 5c of every \$10 you spend comes straight to DRI! Or we can send you a card or key-tag - so easy!



Adopt-A-Dolphin makes a wonderful gift

Special Offer

FREE dolphin swim donated by Moonraker Charters with new Adopt-A-Dolphin memberships

Call 1300 130 949

www.dolphinresearch.org.au

Thank you *Moonraker*



Walk For Western Port

Can’t make it on the day? Do a ‘virtual’ walk and support us the easy way!

**Hastings Saturday,
September 8th, 11am**

Register on-line dolphinresearch.org.au
or phone 1300 130 949



Go to our
homepage and
video segment



www.facebook.com/driface

Letter from the Chair

By Ian Stevenson



This issue tells about eastern Port Phillip, with our common dolphins and a unique larval hot-spot, acting like “book ends” to a remarkable and productive ecosystem.

It is another example of where we need to expand our research and education programs to understand this phenomenon and help the community to live more carefully in the catchment.

This is why we are so excited about Sue Mason’s PhD study on the common dolphins and why we are so committed to doubling engagement through our ‘*i sea, i care*’ program by the end of 2013.

We believe strongly in our ‘*i sea, i care*’ program but it is frustratingly hard

to measure our success. Jeff Weir, our Executive Director is representing DRI at the Victorian Environment Assessment Council’s review of Marine National Parks. Jeff proudly reported that nearly half of the community submissions to the review came from our ‘*i sea, i care*’ ambassadors – and without any prompting from us!

We should be all very proud of these young people, and what DRI is achieving.

Our Spring Appeal is asking you to help us meet our goals by increasing our research and education programs.

WhaleFest and the World Whale Conference

In Brighton, UK in 1982 governments from around the world voted to suspend the hunting of whales. Now, 30 years on Planet Whale (a British not-for-profit organisation) is holding WhaleFest 2012, “the world’s biggest whale and dolphin celebration!”

DRI has been invited to attend the conference which runs from 25-28 October, in Brighton, at the very building where the momentous vote was taken. It is a gathering

of charities, businesses, organisations, governments and individuals with the aim of launching a new campaign - ‘*Save the Whales Reloaded*’.

We are not able to attend, but will be promoting WhaleFest to interested organisations and individuals. If you would like more information, go to www.planetwhale.com or www.whale-fest.com, or call in if you happen to be in the UK in October!

Unwelcome Visitor in Queenscliff

Recently staff from Parks Victoria found a highly-invasive marine pest on a boat in Queenscliff Harbour.

Wakame (or Japanese seaweed) is a brown macroalgae (*Undaria pinnatifida*) native to the waters of Japan, China and Korea. It has been harvested and eaten for centuries in these countries (think miso soup or seaweed salad).

But in Australia and other areas where it is not native, wakame is a major pest, able to grow up to 2m in length in a year. It was first recorded in Australia in 1988 in Triabunna, Tasmania - possibly brought

in with ballast water from ships transporting woodchips.

Wakame can be differentiated from native seaweeds by its distinctive mid-vein (which is a lighter brown) and a ‘frilly’ sporophyll (the reproductive part of the plant). It is easily spread - so please, boat owners, divers and anglers **clean** your equipment.



Photo: Kate Pritchard

Thanks to our Supporters

Artikus Design
Avante Marine
Bulls Cruisers
Canon Australia
City of Kingston
Club Marine
Coast Care
Dame Elisabeth Murdoch
Eastern District Computer Services
Esso & BHP Billiton
Gippsland Lakes Escapes
Good Company
Holland Insurance Brokers
Ian Potter Foundation
MC Real Estate
Melbourne Water
Monash University
Moonraker Charters
Mornington Mermaid Sea Glass
National Bank
Natures Organics
Parks Victoria
Perpetual Trustees
Ritchies Supermarkets
Sea All Dolphin Swims
The Buchanan Group
Trust Company
Visitor Publications
Western Port Marina
White Cleland Solicitors
Yaringa Marina



Welcome to our new Members!

Samuel Allman
Naomi Boddison-Gray
McClelland College
Ricky Hersburg
Marlene and Robert McPherson
Michael Meszaros
Leonie Parker
Nyree Parker
Kristy Smith
Ian Stevenson
Zoe White



Research News



Sue Mason
Research
Officer

We have been keeping records on the Port Phillip bottlenose dolphins for over 20 years, but it wasn't until 2006 that



we first sighted the common dolphins that we believe to be resident to Port Phillip, along the Mornington coastline. Prior to this, common dolphins had been sighted but they appeared to be casual visitors in the bay.

So what are the differences?

Common dolphins have a gold stripe along their flank and grow to approximately two metres in length. They are easily distinguished from bottlenose dolphins, who are grey with a lighter ventral (belly) side.



Esther and her calf, Bouncer

Our adult bottlenose dolphins are slightly larger than a fully-grown common dolphin and easily weigh a couple of hundred kilograms.

The dorsal fin of a bottlenose is falcate (hooked) with an even grey colouration while the common dolphin's dorsal fin

is more triangular with a paler centre.



Bottlenose dolphins

Of great interest to me as a researcher is the difference in community size. Over 100 bottlenose dolphins call Port Phillip home while we know we have approximately 20 common dolphins (some are more photo-shy than others; photos are used for ID). Common dolphins can be seen travelling in varying-sized groups, but they are often observed in open water in super pods consisting of over a 1000 animals, migrating in search of prey.

Why we have such a small community of common dolphins that call Port Phillip home is a mystery that will hopefully be unravelled over the next couple of years with my PhD project.

Community Dolphin Watch

WE NEED YOU to tell us your dolphin sightings. Help us to **'put dots on the map'** of dolphin sightings by going to our website www.dolphinresearch.org.au and report your sightings.

Report Dolphin Sightings



Research Methods by Sue Mason

How do you go about finding dolphins is a question we are often asked. Working with wild animals has its challenges and finding dolphins to study them is sometimes like trying to find the proverbial needle in a haystack.

There are two general survey approaches that we use. Many of our surveys in the past have been opportunistic, in other words we start at a location and pick the direction we are going to travel based on recent sighting information (this is where our community dolphin watch sightings are invaluable).



Diving birds, especially gannets and terns, draw our attention

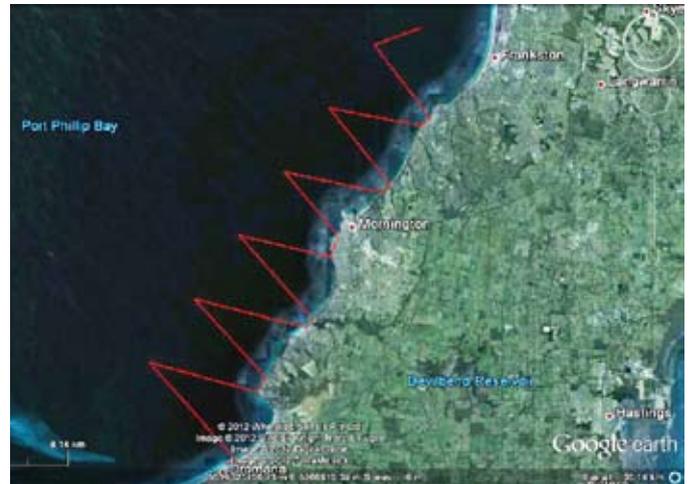
as they will often feed on the baitfish balls that have been herded by the dolphins.

This method is used for general fin identification photos, as well as obtaining genetic and toxicology samples.



But if we want to estimate the population density or abundance of dolphins within an area with statistical certainty we need to use structured sampling methods.

In the case of my PhD work, this will be completed using line transects or a pre-planned track of randomly based lines that cover the area in focus. Each line is a sample of the area. All dolphins sighted as we travel along the survey line and their distance from our vessel



Example of a line-survey completed off the Mornington shoreline

are documented. Modelling accounts for the animals we did not detect.

This information is then mapped using ArcGIS and entered into the software 'Distance' to provide an accurate representation of the dolphins' spatial use of their habitat and abundance within an area.

As you can imagine, having just begun my line transects for my PhD data collection, there's a lot of long, tedious surveys ahead of me and my team.

However, it's all for a fantastic cause - knowing the fine-scale details about this unusual common dolphin population to help us better look after them.

Education News



Mandy Robertson
Education Director

This winter has been a very challenging time for our southern oceans, with eight turtles washed up on our shores (see photo below of one found at Rosebud earlier this month), kelp forests



listed as 'endangered' by the environment minister (18 August, *theage.com.au*) and citizens being asked to report sightings of tropical fish species in Tasmanian waters.

Even our native shark species can find life a struggle, as this recent photo by Lana Ryder of two Port Jackson pups demonstrates.



All these stories illustrate the importance of what we do in promoting Victoria's marine treasures as being "too precious to lose."



The Ambassador Awards celebrate the achievements of the students who take on this role each year. The Kingston Awards night is on Thursday, 13 September at the council offices and the Melbourne Awards will be later in the year.

zyr

Winter has been a busy time for the team and we have welcomed two new members, Alison and Neil Chirgwin, who come with a wealth of experience after teaching at Frankston High School for many years.

We have also been out and about in the Kingston area, delivering Catchment education to nearly 1000 Grade 3 and 4 students in our Ambassador schools, as part of the Kingston '*i sea, i care*' program.



The '*i sea, i care*' family continues to grow. City of Kingston has committed to another year, with 10 new schools joining the 10 from last year that are continuing with the program. Cardinia Shire Council has commissioned us to undertake a similar project and Frankston Council is considering sponsorship of 10 schools in their area. It's a very exciting time.



The following photos are from two very successful workshops run this term. The first was

an innovative session, made possible by Parks Victoria, about the wonders that can be found in Western Port.



The students made videos on the day, using IPADs provided. These were then immediately available for the Ambassadors to download and present to their peers.



The second was our very effective Catchment workshop where, with the assistance of Melbourne Water, the Ambassadors watched a litter trap being emptied and traced the journey of rubbish from our communities to the sea.



Thanks to all our sponsors and team who make it all possible.



Ambassadors in Action in 2012



Melbourne Water is a major partner of '*i sea, i care*' through: **healthy Waterways Waterwatch Program**

waterwatchmelbourne.org.au

For our Ambassadors, go to the blue devil fish!

'i sea, i care' Entry Caring for OUR Marine Treasures



See us in action at dolphinresearch.org.au



Look at these at www.dolphinresearch.org.au

CALL NOW 1300 130 949 or email education@dolphinresearch.org.au

