



The Straw that Breaks the Dolphin's Back

by Jeff Weir, Executive Director

The number of sick dolphin and seal populations was a major discussion topic at the 20th Biennial Conference of the Society for Marine Mammalogy held last December in New Zealand.

The common thread was animals succumbing to viral, bacterial and fungal infections – sometimes all three.



Nearly 1000 dolphins died along the US east coast in 2013 with cetacean morbillivirus as a major cause. An “Unusual Mortality Event” has been declared in response to over 1,096 dolphins dying in the

northern Gulf of Mexico.

Over 400 dolphins have died along the Peruvian coast in January 2014, with a toxic algal bloom as the suspected cause.

Closer to home, cetacean morbillivirus is suspected to be involved in at least some of nearly 3 dozen dolphin deaths in South Australian waters during 2013.

These South Australian deaths followed a substantial fish kill that was linked to a massive algal bloom following a record hot spell in February that year.

It appears that animals in populations seem to be able to cope with multiple environmental stressors but when suddenly something changes, it pushes the animals over the edge and they become sick. It's like the proverbial “straw that breaks the camel's back” – or in our case – the “dolphin's back”.

We suspect that dolphins in many populations have suppressed immune systems due to the high levels of environmental toxins they accumulate being at the top of the food chain. There is evidence that mother dolphins actually excrete quite large amounts of concentrated toxins in their milk, an advantage for them, but highly risky for newborn calves.

A big change such as a flood, major pollution event, algal bloom, fish kill or even sustained harassment could be enough to overwhelm some dolphins and let them succumb to infections that they would otherwise shrug off.

It is crucial to closely monitor the health of dolphin populations and the Institute has taken a leadership role to develop a collaborative project to achieve this as part of the National Dolphin Recovery Plan funded by the federal government (see page 3).



This is a very important step, but it is also critical to better understand the stressors on our dolphin populations and to target our efforts on things we CAN influence.

We hope that for our dolphins, with the work we are doing as part of the Cleaner Yarra and Bay Taskforce and our work with wildlife managers to enforce dolphin harassment laws, we can reduce some of those factors that one day, could become the “straws that break our dolphins' backs”.

Port of Hastings Development and DRI

DRI believes that expansion of the Port of Hastings should only proceed if the long-term protection of Western Port's environmental values can be assured.

The port development is in the early stages of a multi-year process involving feasibility, design and impact studies required before a final government decision sometime in 2017.

Western Port is home to many fascinating and important species of birds, fish, invertebrates, seagrass, mangroves, seals and dolphins.

Pollution from the catchment, the impacts from a changing climate, coastal erosion, seagrass loss and other factors currently affect the bay's environment.

DRI works through our research and education programs and involvement

on the Central Coastal Board and other forums, to improve the management and stewardship for the bay. We are also now a member of the Environmental Reference Group for the Port of Hastings planning.

Consistent with our approach to channel deepening in Port Phillip and other issues, the Institute will work in a constructive and factually-based manner to influence the deliberations about port expansion in the most effective way we can.

Our fourth “Walk for Western Port” is an example of this and is part of our work to build stewardship for the bay and reduce our current impacts.

Please feel comfortable to contact us for up-to-date information or to share your concerns.



**It's On Again! DRI's annual
Walk for Western Port
Sunday, 4th May
10 am or 11 am
\$10/person \$25/family**

Join us as we celebrate the wonders of Western Port with a 7 km walk from Warringine Park, Bittern or a 2 km walk around the Hastings Foreshore.

Book at dolphinresearch.org.au

Call 1300 130 949



Letter from the Chair

By Ian Stevenson

As I looked at a draft of this edition, I became increasingly proud to see the strength of the contributions Dolphin Research Institute is making to benefit our dolphins and their broader marine environment.

On behalf of the Institute's Board of Directors, I am pleased to see Sue Mason and Jeff Weir representing our work at the world's most significant marine mammal conference last December in New Zealand.

Of particular note, their initiative to start an international collaboration that will result in a national program to monitor dolphin health should make us all proud. It ties in well with the National Dolphin Recovery Plan in which we are also involved.

All would agree that it is concerning to read the numbers of dolphins around the world dying from disease or toxins in the environment. How do you address the whole ecosystem problems that are causing dolphins to succumb?

Our answer is to undertake the best science to help understand the issues and to work in other smart ways to influence through initiatives such as: the National Dolphin Recovery Plan, the Cleaner Yarra and Port

Phillip Action Plan, the Litter Hotspots pollution project, and the Port of Hastings Environmental Reference Group.

You can see in this newsletter the considerable and growing involvement of volunteers in DRI. Many thanks go to those contributing to Community Dolphin Watch, plus the new initiative using 'citizen science' in the Community Dolphin Monitoring Project. Do contact us if you are keen to become involved. Also, make a diary date for our Walk for Western Port, on Sunday 4 May.

All these exciting programs add to our formal education programs and 'i sea, i care' Ambassador programs. We now have partnerships with the City of Kingston, Mornington Peninsula Shire, City of Casey, Bayside Council and Manningham City Council - expanding our educational efforts to a larger range of local communities.

We are particularly grateful to all our sponsors and supporters. Without your support we could not progress nor plan our expansion into the future.



2014 Challenge - a Winner around, and on, the Bay

From the Queenscliff ferry, to Cranbourne and down the Port Phillip bayside beaches, over 300 people received DRI's message that our **Living Marine Treasures are Too Precious to Lose** during our 2014 'i sea, i care' Challenge.



Congratulations!

DRI wishes all the best to Jenny, our wonderful Administration/Fundraising Officer on her recent marriage to Scott.



Many of you will have spoken to Jenny on the phone when renewing your memberships or following up on other matters; once again, **congratulations, Jenny and Scott.**

Welcome to our new Members!

Bronwyn Bouchier
Taysha Coates
Debbie Cooper
Ethan Cooper
Ruaire Daly
Kerry Eeckman
Ru'a and Bilal Fisher
Vickie Heagney
Stef and Rhodes MacKenzie
Naomi Marsh
Mercy and Majella McColl
Deirdre McKenna
Averil Mitchell
Donna Mottek
Debbie Pankhurst

Sarah Preat
Cheryl Prosser
Cecilia Ratner
Bernadina Schembri
Annette Schleiger
Jason Tosch
Belinda Van Hoof
Kristen Vidotto
Samantha Wake
Margaret Ward
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Luke Wilson
David York
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Welcome, Dolphin Products

Dolphin Products is based in Heidelberg and produces very sophisticated plastic products. We are delighted that they have agreed to join us as a sponsor. See them at www.dolphinproducts.com.au

Western Port Science Review

The Western Port science review is a collaboration of Victorian government agencies, researchers and the community and is led by Melbourne Water.

Thanks to this work, we are getting a much better understanding of what makes Western Port tick. Five new reports in the study have been released and are available on Melbourne Water's website.

<http://www.melbournewater.com.au/whatwedo/protectrivers/research/Pages/Western-Port-environment-research.aspx>

Research News



Sue Mason
Research
Officer

Society of Marine Mammalogy conference

In December, Jeff Weir and I attended the biennial Society for Marine Mammalogy conference in Dunedin, New Zealand. The conference is the most important event on the calendar of many marine mammal biologists.

I presented a poster on the social associations of the short-beaked common dolphins that reside in Port Phillip.

National Dolphin Recovery Plan

The Dolphin Research Institute has been asked by the federal Minister for Environment to take a key role in a new plan to protect Australian dolphins. As part of this we have initiated a project to develop a long-term approach to monitor dolphin health across Australia. The first discussions occurred with colleagues during the International Marine Mammalogy conference in New Zealand.

The Institute is promised some funding to undertake research and other work here in Victoria under the plan. We will be able to give you more detail in the next newsletter.

We are often asked for advice about 'how can I help?' Besides supporting DRI financially or as a volunteer, our two community programs are an easy and valuable way to actually 'do something' tangible for our dolphins. Both come under the heading of 'citizen science' - read more about them opposite.

Data that we gain from your sightings builds an invaluable resource - vital for planning future uses of our bays.

Become involved, call us for more information on 5979 7100 or 1300 130 949 or contact us at www.dolphinresearch.org.au

Community Dolphin Monitoring Project (CDMP)

Our community dolphin monitoring project trial was held in November last year and was a pleasing success. We were able to track dolphins from three of our four selected sites along the Mt Martha-Mt Eliza coast.



Extreme weather meant that we had to cancel our first official survey session. Strong winds

covered the bay with a wash of white caps, so we had little chance of seeing dolphins. However, we were still able to complete a training session which means that our new volunteers will be up to speed when we hold our next session in March.

The CDMP is DRI's citizen science program that aims to gather 'snapshots' of dolphin presence and movement using a consistent methodology.

DRI's CDMP will be held every second Sunday of the month, from 10am-1pm. Anyone with an interest in dolphins and the marine environment can get



Photo: Common dolphin, Port Phillip by Kylie Owen, University of Qld

involved. Monitoring is not onerous but will require some basic training.

Contact us on 5979 7100 for more information or email research@dolphinresearch.org.au

(Thank you to Esso and BHP Billiton for funding our binoculars)

Community Dolphin Watch (CDW)

Our Community Dolphin Watch program provides an on-going and invaluable database of the dolphins in Port Phillip, Western Port and the Gippsland Lakes. This is citizen science, from long before the term had been invented.

Jeff Weir (DRI's Executive Director) explains it this way. "The wonderful people in Community Dolphin Watch, and they're all volunteers, allow us to put 'dots on the map' on where the dolphins are, and what they're doing."

The sightings that are sent to DRI are all collated and documented by Denise Matheson (below), the co-ordinator of CDW.



Denise is a true stalwart of DRI - you can read more about her in our newsletter, Volume 43, Winter 2011. As Denise said then, and repeats now, "Keep me busy by sending many sightings."

Anyone can become part of Community Dolphin Watch - just spot your dolphin/s, note the time, date, number, species (if you can; common dolphins have a rather

stylish, silvery lower side to them compared to the somewhat larger bottlenose dolphins), what they're doing and where they are. Then let us know.

Remember: do not approach the dolphins. DRI wants your sightings, not your encounters. **If you see anyone acting inappropriately, contact DEPI on 136 186.**

Sightings of dolphins are reported to us from all around the coast during summer. However, over winter it's very different. DRI would like to acknowledge here two of our newest 'dolphin spotters' who send in their sightings of the dolphins in Western Port. Through the depths of winter, Shane Mathieson (below) and Geoff Hall reliably sent in sightings; this is very important data for the 'knowledge bank' we are building about this small group of resident bottlenose dolphins.



Being the manager of the Balnarring Cellarbrations bottle-shop, Shane can't get to the beach quite as often as he would like

to, but is often down there before opening-up shop. (He is also one of our donation tin-hosters).

As Shane says, "This (CDW) is an easy way to give back something to the dolphins. We love having them here, and seeing them is always special. Even my family knows how much I care about the dolphins. They've just recently joined me up as an Adopt-A-Dolphin member, I reckon that's going to be my birthday present from now on...."



When asked if he would be prepared to be in this newsletter, Geoff Hall (above) said "Only if you think people would be interested in a retired couple who walk along the beach to get the mail and spend five minutes reporting dolphin sightings; you can tell them it's not an onerous activity. Of course, it probably helps that we can see them out the window too!"

Community Dolphin Watch is an easy way to be involved in helping our dolphins. The Community Dolphin Monitoring Project is more 'hands on'; both provide valuable data for the future.

Education News

Mandy Robertson
Education
Director



Three months into 2014 and it's already shaping up to be another fantastic year. Bayside City Council has expanded the Ambassador program to 10 schools and we welcome the start of a new partnership with Manningham City Council, with three schools in Warrandyte and Wonga Park. Along with the City of Kingston, City of Casey and Mornington Peninsula Shire, together with the original Melbourne schools, the 'i sea, i care' Marine Ambassador program is growing across the region into a truly diverse and significant champion for Victoria's marine environment.

I am so very proud of the hard work that is done by the Ambassadors, teachers and parents who are, and have been, involved over the many years since its inception. The photo below shows the latest in a long line of young environmental leaders from one of the first schools to enrol, Mentone Grammar. They, and many other students this year, inherit an amazing legacy of passion and dedication for protecting our marine treasures. Long may it continue!



Litter Hotspots Survey

Take five minutes of your time and fill out our Litter Hotspots Survey on-line at www.dolphinresearch.org.au/isic-main.php
Be a part of the future of our bays - today!

Perceptions Survey of Litter Hotspots – with the help of our Ambassadors

The Dolphin Research Institute is one of eleven organisations working on the Litter Hotspots project under the Cleaner Yarra and Port Phillip Action Plan.

Reducing stormwater pollution is one of the most important things we can do to protect our dolphins and their environment.



Floating litter mass at a berth at Docklands

DRI is leading a social research project to better understand the community's perception of our bay and their contribution to stormwater pollution.

The project is very much a partnership with the City of Kingston, Mornington Peninsula Shire, Bayside City Council and Manningham City Council. An exciting part of the survey is that our 'i sea, i care' Ambassadors are helping us to achieve our target of more than 2000 respondents.

Because the results of this study will shape "communication actions" for the Cleaner Yarra and Port Phillip Action Plan, this means that our young leaders will be



The Environment Minister, Ryan Smith with Ambassadors at a workshop at the Carrum Downs pollution trap - these young people are the future for environmental leadership.

contributing something very tangible to the future of our bay.



The photo above shows DRI's Education Officer Neil Chirgwin helping with the survey for an attendee at the City of Kingston's Sustainability Workshop held in January this year.



The survey is on the 'i sea, i care' page (above) of DRI's website and we would appreciate it if you could respond, and once done, pass it on to your friends and colleagues. It takes about 10 minutes to complete.

Can we stress, though, that your accurate answer to the question of how you heard of the survey will help us properly segment the responses.

<http://www.dolphinresearch.org.au/isic-main.php>

Ambassadors in Action in 2014

The first workshop for new ambassadors each year is out on Port Phillip aboard Moonraker. The goal is to provide an experience that stimulates and motivates these young leaders for their year ahead. The smiles tell it all!



Dolphin Swim for our new 'i sea, i care' Ambassadors from Derinya, Dromana, Mount Eliza North, Lysterfield, Osborne, Park Ridge, Somers and Tyabb primary schools.



Thank you, Moonraker!



Proud Partners

We appreciate Melbourne Water's continued support as our major 'i sea, i care' partner for 2014.

'THE SOURCE' is Melbourne Water's eNews quarterly bulletin. It has many interesting articles

with links to further sites. You can subscribe to it at www.clearwater.asn.au