



One of Port Phillip's common dolphins doing a spyhop

V-NICK AND HER CALF

are members of the unique
community of common dolphins
living in Port Phillip



RESEARCH

In 2021 we:

- Progressed a project on Western Port bottlenose dolphins, involving citizen science, university interns and volunteers.
- Released the first catalogue of Port Phillip's vulnerable common dolphins.
- Added the 200th humpback whale into the Victorian catalogue.
- Maintained intern programs to help develop the next generation of scientists.

EDUCATION

In 2021 we provided:

- Marine education programs for primary, secondary, tertiary, early education students - online during COVID.
- Programs for adult groups and community events.
- Mentoring for education students.
- Innovative on-line education.

LEADERSHIP

In 2021 we:

- Developed over 500 young leaders in our *'i sea, i care'* Ambassador program (bringing the total to 7,000 since 2001).
- Developed our *'i sea, i care'* **Communities** program to empower the wide community to protect our bays.
- Actively influenced investigations and policy development relevant to marine and coastal protection.

The Dolphin Research Institute helps Victorians to care for our dolphins, whales and their environment, especially our wonderful bays.

Since 1991 supporters like YOU have helped to provide solutions through innovative research, marine education and environmental leadership, to create lasting impacts on laws to protect our dolphins, and culture in our *'i sea, i care'* Ambassador school communities.

You can help by: Joining Adopt-A-Dolphin, becoming a Regular Donor, booking an Education Program, Reporting sightings, Volunteering, and having your group join our *'i sea, i care'* **Communities** Program.

Dolphin Research Institute | Western Port Marina, Hastings
5979 7100 | www.dolphinresearch.org.au



QR Code to videos

DRI Snapshot



Baby Dolphin Rescue





30th
ANNIVERSARY

Welcome to our Summer 2021 Snapshot.

We are delighted to share some positive stories of our research and education teams great work that is helping to build optimism as we head into 2022 – and beyond.

In this Snapshot, you will find important outcomes we have achieved despite challenges – all made possible because of supporters like you – and include:

- The release of the first publically accessible Common Dolphin Catalogue.
- We added the 200th humpback whale fluke to the Victorian Catalogue.
- Online programs for our *i sea, i care* Ambassadors.
- Successful university intern programs.
- Leadership with Dolphin Distancing.

We warmly congratulate Mandy Robertson, our Education Director, for receiving the 2021 Dame Phyllis Frost Award from Keep Victoria Beautiful.

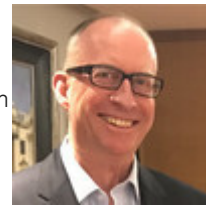


This award recognises an outstanding individual who has shown environmental leadership and contribution to the community and local environment, and someone also active with Keep Victoria Beautiful.

A well-deserved accolade for a vital member of our team. Mandy is pictured

receiving her award with Jacqueline Salter, the 2020 winner.

On another positive note, we welcome Mr Paul Ramadge as our Board Chairman. Paul has a diverse background, including Editor in Chief of the AGE, a Professorial Fellow at Monash University and other leadership roles.



I want to share some words that Paul wrote as part of a future vision document.

"Looking to the Dolphin Research Institute's next five years, we are, despite societal challenges thrown up by the pandemic, resolute about the enormous opportunity ahead of us to strengthen Victorians' shared stewardship of dolphins and whales."

"The joy that comes from caring for dolphins and whales is at the heart of DRI. So many of our volunteers and donors tell us that supporting DRI makes them happy. The same is true for the thousands of schoolchildren who take part in our education programs."

"We know that a lot more needs to be done to fulfil our mission. Our plans focus on creating lasting impacts to benefit dolphins and whales, their environment and the Victorian community. We plan to scale up field research and citizen science and double our number of i sea, i care schools and education programs."

We welcome Paul and express our huge gratitude to past Chairman, Paul Curtin, whose wisdom and leadership guided DRI through some significant challenges.

Our dream to build our organisation is achievable with your help. Please support our Summer Appeal. Follow this link (if reading online) or go to our website.

www.dolphinresearch.org.au

Looking forward to hearing from you.

Jeff Weir OAM, Executive Director
director@dolphinresearch.org.au
03 5979 7100



P.S. On behalf of all the DRI family I want to thank all the individuals, schools, businesses, organisations, foundations and governments who have supported us over 30 years - Thank You All.

Our promise to you is that we will always strive to achieve lasting impact, to make the most from your support, and to excel at genuine community-based innovation and leadership.

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Research Back on the Water



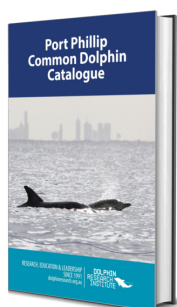
We are delighted to have our team back on the water following many months of lockdown. We can report that the new-born calves we saw in previous surveys seem to be doing well. Early analysis of photo images have added 10 newly identifiable common dolphins to the catalogue. They are likely to be animals that have gained identifiable markings since the last surveys. (Thanks to Allan Dillon for the image).

While not on the water our team has been catching up on analysis and as you will see below, having an impact.

Release of Port Phillip Common Dolphin Catalogue

We are proud to share the catalogue of Port Phillip common dolphins representing the 'tip of the iceberg' from 15 years of water-based surveys and many thousands of hours of analysing close to 100,000 digital images.

This document is the first and only publicly available identification catalogue for Port Phillip's resident common dolphins. The catalogue fills a gap in the understanding of this unique community of dolphins. It provides the foundation to understand life histories, social bonds and habitat use. We consider the catalogue to be a living document that we will regularly update as we identify new animals and/or their features change.



During the past three years, we have reviewed and significantly improved our Photo Identification methods, facilitating the production of this catalogue.



The above image shows our researcher taking a photo of "DD" with a calf. You can't quite see the camera but the image captures the GPS location and time. DD is named for the damage to its dorsal fin it received when quite young. (All images are taken under a scientific research permit allowing us to approach dolphins closer than the normal distances.)

DD is one of the seventy individual common dolphins presented in the catalogue that are identified from markings on their dorsal fin. Subtle marks on many dolphins require an experienced eye. DD is also one of our Adopt-A-Dolphin family of dolphins that you can support. Our research permit authorises us to approach the dolphins closer than the regulations for recreational boaters.

We repeat the ID process to check for errors. Further analysis teases out the numbers of permanent residents or transients; the numbers that we can't ID but are still present; calving rates and success; skin health; and the extent of human impacts from vessels. Some of this will involve citizen science.

The release of our catalogue is an opportunity to pause and reflect on the extraordinary situation where a normally oceanic dolphin species has come to live in our bay. It is at a time when dolphin populations around the globe and elsewhere in Australia are being lost. A positive story that leaves no room for complacency if we are going to ensure the well-being of these beautiful creatures in a future of threats from rapidly changing climate and human population growth.

Producing this catalogue would not have been possible if not for the input of the many post-graduate students, volunteers, citizen scientists and professional collaborators that the Dolphin Research Institute has had the good fortune to work with over the last 15 years.

Access it here: <https://www.dolphinresearch.org.au/ppcdcat/>

200th Humpback Whale



In what is a significant milestone, the 200th humpback whale was just added to the Victorian humpback whale catalogue by our Research Officer, David Donnelly. What makes it significant is that it took 15 years to reach 50 whales in 2017, another three years to reach 100 whales, and with the help of an expanding group of citizen scientists (especially Wildlife Coast Cruises), only another year to reach 200! David is able to track whales migration to NSW and Queensland by loading flukes into an online database.

Two Bays Whale Project



The Two Bays Whale Project is a key Citizen Science program run by our Research Officer David Donnelly. It provides a crucial insight on the movement of whales through central Victoria.

Preliminary analysis shows that while the COVID lockdown made it harder for many people to travel to the coast, we still had fantastic support from volunteers who live close to the water.

This year we received 150 separate sighting events of 259 individuals from three whale species: humpback whales; southern right whales and killer whales.

There were at least three visitations of killer whales including one with a very young calf. (Earlier image by Anna Carson).

At least six southern right whale calves were recorded in Victorian Waters this year.

All whale sightings reported to the Two Bays Whale Project are shared with wildlife managers to achieve protection. The Two Bays Whale Project is also a partner with the Southern Hemisphere Whales and Climate Project.

Dolphin Harassment Reports...

The image of a vessel harassing a dolphin was taken by one of our citizen scientists near Mornington. It was reported to the police and also DELWP.



The witness described the individual changing direction and repeatedly approaching the dolphin. So there was no question that he approached the dolphin closer than the 300m distance for personal water craft (PWC).

Following the report of this episode in the Peninsula papers (<http://baysidenews.com.au/2021...>) I was contacted by the president of a PWC club who wanted to know how to help. We have spoken before and he committed to encouraging his members to sign up to our Dolphin Distancing program. See page 10 for more details of the program.

What a Difference an Intern Makes!

Developing a robust intern program has been a key priority, hosting students from five universities during the past four years. Despite COVID, we have had nearly 40 interns during the past two years. This is a win-win program that helps to develop young scientists but also significantly contributes to our programs.

We take a different approach to most intern hosts, structuring a program with intern workshops where students share their work. We discuss issues like science ethics and things like Environmental Effects Statements or other reviews that we are working on.

Students develop a work plan with what we call a "bookend project" to complement the field time in the Western Port Project. This has been critical for students during COVID lockdown because formal internships are a university subject where they need to achieve specific goals to pass their subject. All of our interns have done very well.

So what have they done this year?

Western Port Project

This study aims to understand the dolphins' movement and the extent they interact with vessels and animals. Students completed many hours of beach-based surveys for dolphins off Somers, Balnarring and Merricks in the first half of the year, but lockdown during the last six months curtailed fieldwork. But we were able to review the data and refine our web-based app called Podsurveyor used to collect data for the project. This is now ready for Summer interns and volunteers.



Port Phillip Project

Students helped develop a new web app for collecting data for a study of the common dolphins to understand their movements and the extent they interact with vessels. It is now ready for volunteers and interns in 2022.



Other projects

- A review of the United Nations Sustainability Goals and how they relate to DRI.
- A plan to roll out the Dolphin Distancing program.
- A review of our IT systems to improve data security by migrating into the cloud, change the way we manage photo-ID images, and plan how to use Artificial Intelligence in our research data analysis. This sets the scene for another intern project in 2022.
- A review of the behavioural science literature to benchmark our behaviour-change programs such as Dolphin Distancing.
- A review of the genetic science regarding the so-called burrunan dolphin: the conclusion is that the bottlenose dolphins in Victorian waters are not a new species.
- Video interviews (over Zoom) with marine scientists and others who work in the marine environment. We will post these on the **i sea, i care** Communities portal on our website.

This is a huge contribution of over 2,000 hours from young scientists from five universities. Many are staying on as volunteers – a true win-win!

Education Back to Work

Our team is now finally able to work with children in person after another prolonged period of COVID-19 lockdown. Our staff have remained positive and used online programs to stay in touch with our schools. They are now very excited and are busy with excursion bookings for the last weeks of November and December.

I SEA I CHAT

I SEA I CHAT was developed last year as an online tool to work with our i sea, i care Ambassadors during COVID, enabling our team to connect with hundreds of our young leaders.

Weekly I SEA I CHAT sessions played a similar role this year and also provided daily programs to share National Science Week with our students. Students met working scientists who spoke about their work and their journeys and were able to ask questions.

Whales and Ambassadors...

An I SEA I CHAT session with David Donnelly, DRI's Research Officer, gave students a glimpse into the world of dolphins and whales, and the challenges to studying them. David wears many hats as a marine researcher with extensive experience in a range of scientific disciplines. He oversees various citizen science projects, including the Two Bays Whale Project and Killer Whales Australia.



David thrilled our Ambassadors with stories of his many dolphins and whale encounters and the different dolphin and whale species. They also learned about particular locations and seasons for sighting dolphins and whales, alongside some of the issues these beautiful creatures face due to a changing climate and increasing human populations along our coasts.

The Ambassadors had some great questions for David, including how they could help our dolphins and whales! One way to help is to log your sightings with us at Podwatch on DRI's website.

Stingray Diaries



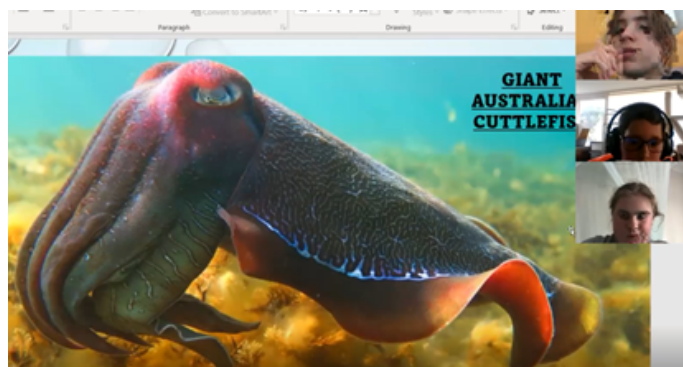
Our students also met Joni Pini-Fitzsimmons, a PhD student from Macquarrie University studying stingrays in a project she calls the Stingray Diaries. She presented her work in a fun and engaging way, covering ray biology and ecology, some of the issues threatening rays, and her journey that led to her studying these amazing creatures!

After Joni's presentation, the

students had so many amazing questions, and many commented on how much they learned and how much fun science can be. A great outcome.

Peer Teaching in Lockdown

Training Ambassadors as peer teachers is a core part of our *i sea, i care* program. It means that we work with four ambassadors, and they then work with hundreds in their school communities. This both amplifies our stories to a wide audience and develops the students as young leaders.



This year under lockdown, our ambassadors taught each other their own I SEA I CHAT sessions. In a novel twist, Ambassadors took on the name of the animals in their presentations.

'Cuttlefish' presented on the Australian Giant Cuttlefish, and he wowed the Ambassadors with some amazing facts about these incredible animals.

'Sea Dolphin' gave an excellent presentation on the issue of plastic on our oceans, and she had some great tips for Ambassadors to reduce their use of plastics!

'Snubfin Dolphin' told us about her campaign 'BYEBYBOTTLE' to get rid of bottles, and she has her own website (<https://rghennessy.wixsite.com/byebyebottle>).

'Mako Shark' is creating a calendar as a fundraiser for threatened species and Australian animals. He presented one of his paintings - a beautiful blue whale.

Seeing young leaders develop through our program – even when it can only be online – is rewarding. It is also only possible because of the parents, teachers and schools who have now made it possible for 7,000 young leaders to participate.

Peer Teaching for Real



Online is not the same as the real thing. Here are some animated peer teachers working with younger students at a school earlier in the year. We look forward to more programs in schools in 2022.

Pollution Workshop



Pollution from the roads, drains, creeks and our suburban lives is one of the biggest issues facing coastal environments. So our catchment pollution workshops where Ambassadors can see and smell what is washed off our streets are incredibly important.

The journey starts at a huge stormwater drain at Banyan reserve where students follow the outlet to the artificial wetlands created by Melbourne Water to catch litter, sediment and pollutants from reaching Port Phillip.

Ambassadors are trained to test the water in the wetlands and search for bugs that indicate whether the water is healthy or not.

They then trace the stormwater path to Mordialloc Creek and then out to Port Phillip.

Along the way they are shown the floating litter traps that capture litter floating along the creek. They can also see lots of litter trapped by vegetation lining the banks of the waterway.



These traps are a last ditch attempt to stop litter from reaching Port Phillip and our beaches. They only stop floating litter - the sediment and dissolved pollution flow straight out into the bay. This is why it's so important to change how we live our suburban lives and reduce the chance of pollutants getting into drains in the first place.

Ambassadors later share their experiences with their school communities, reaching a possible audience exceeding 100,000 people.

Giving Back and Learning

An important part of the Ambassador experience is to "give back" while learning. So their final workshop works with coastal rangers to help with weeding or revegetation. They also learn from indigenous leaders about the way their ancestors lived and cared for the land.



One of our first post-lockdown workshops was at Jacks Beach for our Mornington Peninsula Ambassador's Coastal Workshop. Ambassadors started the day with an indigenous workshop with Sean from Living Culture. Sean showed us a range of different plants used for medicine and food, how to throw hunting spears, and the Ambassadors even had a go at making a fire!



Next up, Elley and Clayton from the Mornington Peninsula Shire led our students through Warringine Reserve to view birdlife and discuss some of the threats to the mangrove and saltmarsh wetland. Climate change is a huge threat to these ecosystems.



Students learned about the indigenous plants and animals living along the Jacks Beach track and the weeds that past Ambassadors have helped to clear over many years.



A Whole Year Program

i sea, i care is a whole-year program designed to develop young Ambassadors to grow into environmental leaders in their school communities. The three workshops shown here, Peer Teaching, Catchment Pollution and Coastal Environment are key to the program's success. Normally, the first workshop is to take our students out onto the bay with Moonraker Dolphin Swims, to help them understand what it's all about but most importantly, get them excited for their year ahead.

Leadership

LEADERSHIP is our compass to guide all we do, to create leading programs, to lead through creating impacts, and to develop future leaders. We do this by:

- Conducting essential research to understand dolphin and whale communities and the threats they face.
- Educating thousands of schoolchildren each year and encouraging the wider community to take greater ownership of our bays.
- Sharing important ideas and being a reliable source of knowledge.
- Influencing environmental policy and decisions.
- Developing leaders through our *i sea, i care* and intern programs.

Below are some other aspects of our work: helping our audience know who to trust on things like climate change, DRI's work in the media and the wide community, and our innovative evidence-based behaviour change program with Dolphin Distancing.

Climate Change - Who Do You Trust?

How DO you figure out who to trust in an era where community respect for expertise seems to have died?



P.S. Under the wave in the image is Mornington Pier on the type of day that is becoming more normal. Image Cameron McCullough 24/6/2014

The Intergovernmental Panel on Climate Change (IPCC) released its 6th report earlier in August. The Conversation provides a special update, and this alone is sobering reading.

As always, we saw critics focus on the report not being perfect, different from the last one, or lacking black and white certainty. They will expect you to trust them instead of the IPCC.

In our changing climate, the most credible specialist is the United Nations' IPCC which was formed in 1988. The new report is the work of over 250 leading climate scientists who reviewed the research from many thousands of climate scientists working from many countries. Their work brings our best understanding of what is happening to our planet into one report.

Follow the link (below) to The Conversation feature about the IPCC report. But before you read, look to the top right corner to see the author's positions and affiliations to help you decide who to trust. You will see senior climate researchers from the CSIRO, the Australian National University, and the University of Melbourne. These credible scientists are among the 250 plus co-authors of the final 3,900-page report - and they should be listened to.

<https://theconversation.com/this-is-the-most-sobering-report-card-yet-on-climate-change-and-earths-future-heres-what-you-need-to-know-165395>

I suspect helping others be effective consumers of experts is perhaps one of the most important ways we can build a community with an appetite and political will to respond to climate change.

DRI Features on the Eco Show



We are delighted to share an episode about DRI that screened recently on the Eco Show. The team were a pleasure to work with, and helped to tell the story of our wonderful dolphins, whales and bays, and our work. We hope you enjoy it. A big thank you to Bridie, Lauren, Haridharan and Nick from C31! Also to Mandy, Dave and Fiona from our team.

<https://youtu.be/JeUIHTVRU4A>

Snapshots from 2021 Island Whale Festival



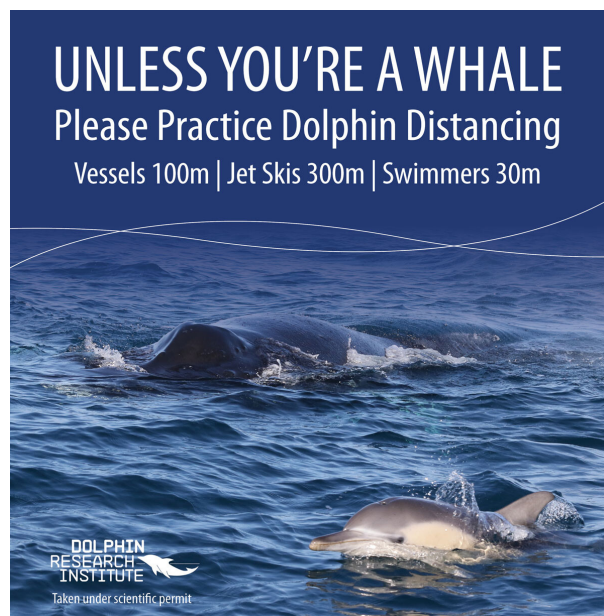
The Island Whale Festival did manage to run this year, in between COVID lockdowns. Pictured is our inflatable education whale used for our nine booked-out whale education sessions. A dad-daughter team in our dolphin and whale ID session.

This is an important community engagement program for DRI, so we are delighted with the outcomes, considering the compromises forced on us by COVID, and appreciative to the team at Destination Phillip Island for overcoming the many challenges to delivering a great festival for 2021.

Thank you to all our staff and volunteers to helped to deliver a great result for the festival and DRI.

P.S. Thanks to everyone who entered our competition and especially Wildlife Coast Cruises, Island Surfboards and the Phillip Island Chocolate Factory for donating prizes.

DOLPHIN DISTANCING



Last Summer we launched a world-first program to improve how people behave around dolphins on the water. In an evidence-based approach we are building bridges to organisations, including yacht, lifesaving, jet ski and other groups, to seek commitment from the community for "Dolphin Distancing".



The program works by boat owners receiving a sticker AFTER they have committed to **Dolphin Distancing** on our website. The model is based on changing the "social norm" on the water. It's just like in experiments where actors demonstrate the social norm of picking up litter and placing in the bin - people follow. They follow when the actors drop litter close to the bin.

Help us to change our behaviour on the water by committing to Dolphin Distancing yourself and also encouraging others too. Go to our website to commit. www.dolphinresearch.org.au

ADOPT-A-DOLPHIN - 2021



HELP PROTECT OUR DOLPHINS AND WHALES

Adopting a dolphin is one of the most special ways you can help to protect Victoria's most loved creatures and their environment.

Adopt-A-Dolphin makes a perfect gift.

They join our loyal family who trust us to make a difference. This is what they say:

***"DRI gives dolphins a voice – our family a voice – and a positive way to support marine life and conservation".
"It has and continues to be, such a rewarding journey".***

Gifting membership to a family member or other special person in your life, not only shows how much you care about them, it also shows how much you care for the marine environment and its inhabitants. (It's also a perfect gift to yourself).

Adopt-A-Dolphin membership costs just \$98 a year and supports Research, Education and Leadership. Call us 5979 7100, go to our website www.dolphinresearch.org.au or follow the QR code.



Thank you for your support

None of our work would be possible without the generous support from individuals our volunteers and citizen science participants. Special appreciation goes to Jean Weir, the JMS Foundation and our loyal Adopt-A-Dolphin members and donors (many for more than 20 years and up to 30 years).

We welcome new business supporters. The Canadian Shipping Lines (Australia) joining our Leadership Circle Program and 99 Bikes who donated nearly \$6,000 through their employee program.



A special thank you to the many hundreds of loyal businesses who host collection tins and donate to our fundraising auctions. Together you have helped to raise over \$30,000!

A transformational grant

We thank the Helen Macpherson Smith Trust for a \$45,000 Capacity-building grant to support the upgrade to our member database and also our website. This will improve data security, integrate all our systems and boost efficiency so we can achieve much more.



Helen Macpherson Smith Trust

Thank you to our partners with the **'i sea, i care'** School Ambassador Program.



Thank you to members of our Leadership Circle Program.



There are many ways you can support DRI

- Volunteer or become a formal intern.
- Join Adopt-a-Dolphin or give one as a gift.
- Become a sponsor
- Donate to appeals, or as regular giving or make a bequest.
- Commit to actions to reduce your impact.
- Host a DRI collection tin in your business.

Call, email, or go to our website for more information.

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