WHALES OF THE WHITSUNDAYS 2023 Annual Summary

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Hear from our President

The Whales of the Whitsundays (WoW) program started in early 2023 off the back of discussions at the Whitsunday Local Marine Advisory Committee around increased whale and boat numbers, and concerns about whale strikes and what may happen with climate change and the associated decreases in their food sources (e.g. krill).

Quickly after forming the program steering committee we had a group of enthusiastic members and a list of actions and goals. On reflection, one of the most exciting things about running this program over the past year has been the collaboration and support from community, industry and Government. I have worked for many years in "drier" areas of science (I do a lot of work in climate change risk) and have found that whales, being such large and majestic animals, really can draw a crowd and inspire people to take make positive changes for the environment.



One of the most exciting things about running this program over the past year has been the collaboration and support from community, industry and Government.

Olivia Brodhurst President

It has been amazing to see how many people did not realise the importance of the Whitsundays as a humpback whale calving area and are now engaging in recording sightings, sharing information on social media and wanting to learn more. Our regions Traditional Owners have brought an extra special element to the program. They have shared their deep cultural connection with whales and see themselves as guardians, watching over the whales as they are in the region calving. Anyone that attended the inaugural Welcome Whale Event would agree that it was a very emotive and spiritual night where we were privileged to share in traditional knowledge and culture.

Thank you to everyone that has been involved in the WoW program through 2023. Let's keep this momentum going through 2024 and beyond! Olivia Brodhurst, WoW President

WoW Steering Committee

A Steering Committee was formed to drive the Whales of the Whitsundays Program. The inaugural steering committee meeting was held on 6 March 2023 and meetings were planned to be held once a month. There were a total of eight meetings in 2023 (Sep and Nov were missed).

Steering committee membership was open to anyone in the community who was interested. There were representatives from the Great Barrier Reef Marine Park Authority, Whitsunday Regional Council, Traditional Owners, local NRM, tourism operators, and the general community.

One of the large goals of the steering committee was to have the Whitsundays designated as a Whale Heritage Area (WHA) through the World Cetacean Alliance (WCA). This would put the Whitsundays on the map globally as an area important for whales. To qualify for global accreditation, destinations must meet set criteria which recognise their commitment to cetacean conservation through responsible wildlife interaction and sustainability, these include:

- 1. Encouraging Respectful Human-Cetacean Coexistence
- 2. Celebrating Cetaceans
- 3. Environmental, Social and Economic Sustainability
- 4. Research, Education and Awareness

The Whitsundays was accepted as a candidate site by the WCA on 26 January 2023. Throughout 2023 many hours of research and writing were spent on the final application for Whale Heritage Area status.

Financial Report

The steering committee and its activities were mostly self-funded in 2023. Outside funding of \$8,000 was received by event sponsors for the Welcome Whales event. Whales of the Whitsundays also applied for grant funding through DES Engaging Science Grants, but was unsuccessful in 2023. We received good feedback on the application and intend to reapply.

Special thanks to steering committee members Olivia Brodhurst, Director of Whitsunday Environmental, and Crystal Lacey, Director of Little Fish Tourism Development Consulting, for their personal financial contributions in making the first year successful. We would like to thank donors for in-kind support received throughout the year from:

- Deanna Vierling for secretarial and "everything" support
- The rest of the steering committee for guidance and volunteering expertise and time
- The University of Queensland whom provided a researcher to train us on the use of hydrophones
- Iconic Whitsunday Adventures for the use of their vessel Viper for hydrophone training day

- The Great Barrier Reef Marine Park Authority for running the pre-whale season event
- The Coral Sea Marina Resort for providing space for multiple events / presentations
- Tourism Whitsundays for allowing us to use your boardroom for meetings
- Nicole and Ben Rosser from Whitsunday Audio Visual for lighting at the Welcome Whale Event
- Cr Clay Bauman for video creation for Welcome Whale Event
- The Great Barrier Reef Festival team and Whitsunday Creative Connections supporting the Welcome Whale Event
- Anyone else we have missed just know, you all made a difference!

Merchandise



NautiLass Apparel made t-shirts and stickers for the Whales of the Whitsundays and the Welcome Whale Event. The merchandise was sold at the event, at the Great Barrier Reef Festival and ad hoc throughout the year.

The community loved the shirts and were quick to support the initiative. A total of 52 adult shirts and 33 kids shirts were sold in 2023. 32 shirts were donated to committee members, Traditional Owners, etc. All money raised was donated to Whales of the Whitsundays program.

Explore our Achievements

Started in 2023, the WoW has brought new events and educational opportunities, improved information sharing, and increased stewardship of whales to the Whitsundays. There were a total of seven community events and/or presentations that Whales of the Whitsundays were apart of in 2023. These include St. Catherine's Open Day, the Hydrophone Training Day, the Pre-Whale Season Information Night, the Traditional Welcome Whale Event and the Nature Celebration, Environmental Workshop and Family Fun Day at the Great Barrier Reef Festival.

Cultural Welcome Whale Event





Our largest event of 2023, the regions first annual Cultural Welcome Whale Event was on the 16th of June at Airlie Beach Foreshore. The event was led by Traditional Owners and saw the community united and inspired by cultural dancing, music, and art. The event attracted over 700 people and was a huge success.

Casey McAvoy, a local Ngaro woman, painted a humpback whale and her calf that attendees were invited to add their handprint to. The piece is now proudly hung in the Cruise Whitsundays Terminal at Port of Airlie.

The event was made possible by event sponsors, Whitsunday Regional Council, Ark Energy, and North Queensland Bulk Ports Corporation.

The Great Barrier Reef Marine Park Authority together with WoW held an information night geared towards skippers of local tourism vessels and local boat owners. They encouraged skippers to take extra care during whale season and to log their sightings to Eye on the Reef.

Held at the Lookout Lounge at Coral Sea Marina, the room was packed out with over 100 attendees. Information was provided on the regulations around watching whales in the Whale Protection Zone.

Pre-Whale Season Information Night



Great Barrier Reef Festival



The theme of the 2023 Great Barrier Reef Festivals was whales! There were many whale centred events and activities throughout the weekend. Notably, the inaugural Great Barrier Reef Festival Art Show's 'Grandeur of the Humpback Whales' had almost 50 submissions.

WoW volunteers had stalls at the Nature Celebration and the Family Fun Day. At the Family Fun Day, WoW set up an activity to engage kids and teach them (and their parents) about approach distances around whales in the Whitsundays.

The Whales of the Whitsundays, in collaboration with the University of Queensland's (UQ) Cetacean Ecology Group, provided a training day on the use of hydrophones. The training took place on *Viper, Iconic Whitsunday Adventures* and had 36 attendees.

Genevieve Williams (pictured), a PhD Candidate from the UQ, helped to conduct the hydrophone training day and gave practical demonstrations on the use of hydrophones.

Attendees also heard pre-recorded whale social noises and songs though the boat AV system and learned about song makeup and evolution. Some tourist operators have purchased their own hydrophone equipment and intend to contribute to UQ's Humpback Whale Song Long-Term Monitoring Program.

Hydrophone Training Day





Media and Communications





Citizen Science

The Whales of the Whitsundays were featured in two front page newspaper articles and three other print articles over the year.

A whale centric <u>Facebook</u> page was started by Deb Duggan and Emily Monacella before the creation of the WoW program. Both Deb and Emily are Steering Committee members and happily rebranded the page to align. By the end of the year, the Facebook page had 1568 followers.

Olivia did two radio interviews and two television interviews in 2023, all having to do with the inaugural Welcome Whale Event. Crystal also did radio and television interviews on the Whales of the Whitsundays.

Olivia and Crystal recorded with *Whale Tales Podcast* on <u>Humpbacks in the</u> <u>Whitsundays</u>. They also voiced over a video produced by the WCA for the promotion of the Whitsundays WHA. There are three websites featuring WoW information; <u>World Cetacean Alliance</u>, <u>Tourism Whitsundays</u> and <u>Wildlife Heritage Areas</u>.

Citizen science is the collection and/or analysis of data relating to the natural world by members of the general public, typically as part of a collaborative project with professional scientists. The advantage of using citizen science as a tool has been well documented and includes:

- Allowing environmental observations to be done at very large geographic and computational scales
- Obtaining larger data sets to inform modelling
- Increased level of scientific literacy within the community, and
- Encouraging individuals to consider STEM pathways and careers

The Whales of the Whitsundays had a large focus on citizen science in 2023 and part of that included a campaign to get locals and visitors more aware and involved in reporting their interactions to ongoing monitoring programs including Eye on the Reef, HappyWhale, and UQ's Humpback Whale Song Long-Term Monitoring Program.

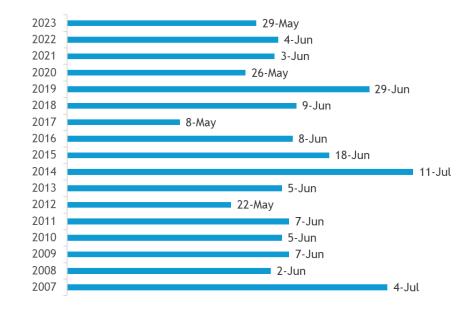
Citizen Science Data Disclaimer: The data provided herein are sourced from citizen science initiatives and may contain inaccuracies or errors. While every effort has been made to ensure the quality and reliability of the data, it is important to recognise that citizen science involves contributions from volunteer who may vary in expertise and resources. Therefore, readers are advised to exercise caution and use the data for informational purposes only. We do not guarantee the accuracy, completeness, or suitability of the data for any particular purpose.

Eye on the Reef

Developed by the Great Barrier Reef Marine Park Authority, the Eye on the Reef (EotR) app provides a pathway for all marine park users to become citizen scientists by submitting sightings and important information to the Reef Authority. The Reef Authority and researchers then use this data to direct management efforts and actions.

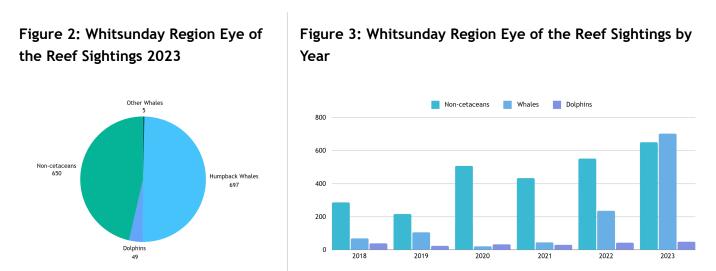
Data was provided by the Commonwealth of Australia acting through the Great Barrier Reef Marine Park Authority - Eye on the Reef program.

Whitsunday Region



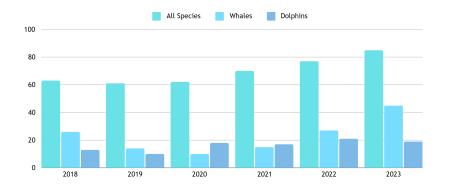


In 2023, 1401 sightings were logged on the EotR by 85 different people in the Whitsunday region. A total of 702 whale sightings, 697 of them being Humpback Whales reported by 45 people. A total of 49 dolphin sightings reported by 19 people.



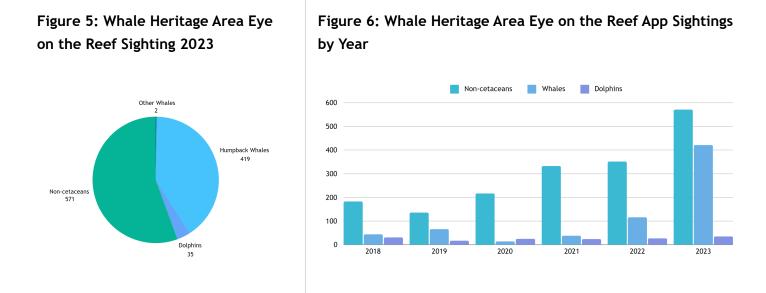
Compared to 2022, app engagement by the Whitsunday community and visitors substantially increased with 571 more total sightings logged in 2023, a 68.8% increase. People reporting also increased from 77 to 85 people.

Figure 4: Whitsunday Region Eye on the Reef App Engagement by Year



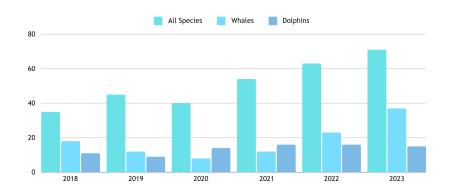
Whitsundays Whale Heritage Area

The WHA aligns with the Whitsundays Whale Protection Zone (see zoning map 10). In 2023, there were a total of 1027 sightings logged on EotR by 71 different people within the Whitsunday WHA. 421 whale sightings, 419 of them being humpback whales were reported by 37 people. 35 dolphin sightings were reported by 15 people.



Compared to 2022, app engagement has substantially increased within the Whitsunday WHA, with 533 more total sightings logged in 2023, a 107.9% increase. People reporting also increased from 63 to 71 people.





Acoustic Monitoring

The University of Queensland's (UQ) Cetacean Ecology Group has been studying the population of humpback whales that migrate along the east coast of Australia for more than 25 years. They focus on a variety of aspects of humpback whale ecology, including monitoring patterns in song.

Together with researchers UQ's Cetacean Ecology Group, we engaged citizen scientists and tourism operators in the Whitsundays to record whale vocalisations and songs with hydrophones - devices used to listen and record underwater sound that can then be read using a spectrogram. These recordings are then contributed to the Humpback Whale Song Long-Term Monitoring Program.

A total of 23 files from the Whitsundays were uploaded to UQ's Whale Song Long-Term Monitoring Program in 2023. Our contribution will help the Cetacean Ecology Group expand their study along the east coast and help monitor changes in the song that occur yearly.

HappyWhale

Humpback whales have unique patterns of black and white pigmentation on the undersides of their flukes (tales) that can be used as identification - kind of like a fingerprint. Scientists have used fluke photos to track individuals and to monitor populations since the 1970's. More recently, scientists have begun using AI to match photos with scientific collections that has made global tracking of whales possible.

<u>HappyWhale</u>, the largest individual identification resource ever built for marine mammals, allows citizen scientists to participate in identifying and tracking marine wildlife by submitting fluke images to the dataset. HappyWhale will then provide you information about the whale, such as where it has been sighted in the past, and will give you ongoing updates any time it is sighted in the future. HappyWhale also gives you the opportunity to adopt and name your whale by donating to ocean conservation.

During the 2023 season, WoW encouraged everyone to submit their tail fluke images to HappyWhale. There were six tail fluke imaged from the Whitsundays logged on HappyWhale in 2023.

Red Cat Adventures named <u>Echo</u> in 2023. Echo was first pictured in the Whitsundays in July 1999 by Pacific Whale Foundation. Deb Duggan photographed Echo again in August 2018. This shows Echo has been visiting the Whitsundays for almost 20 years! See Echo's mapping from HappyWhale;

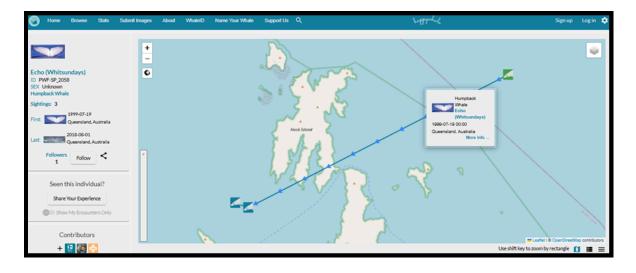


Figure 8: Echo's HappyWhale map

Regional Insights

Whale Strike Incidents

WoW has been investigating how to best get whale strike incident information. This has been harder to get than expected. The Department of Environment, Science and Innovation (DES) have provided some useful information and we are still waiting on other departments to provide data. DES data shows that in the last five years there have been two verified reported cetaceans within the Whitsunday Plan of Management with propeller damage observed by the reporting member of the public (note that these reports were not substantiated by QPWS).

An incident reported from boats travelling to the 2023 Brisbane to Hamilton Island Yacht Race occurred offshore Sarina, outside of the Whitsunday Plan of Management. This strike resulted in the keels of two vessels needing to be replaced.

Strandings

DES considers a stranding to include any incident where a marine animal is:

- Aground on a shore; or
- In a helpless state (such as entangled or incapacitated); or
- Sick, injured, or dead (and includes animals at risk of becoming one of these states)

Incidents with whales, such as collisions with propeller strikes, if they had been reported and verified, would be captured in the stranding database. Figure 8 gives details for total number of verified incidents/strandings related to whales in or adjacent to the Whitsunday Whale Protection Area. Matters of compliance, such as reports of people swimming with whales, are not captured in this database.

There have been five verified whale stranding reports over the last five years, four of which occurred in 2023. There are no verified reports of dolphin strandings within the Whitsunday Plan of Management in the last five years.

Figure 9: DES verified whale strandings in the Whitsunday Whale Protection Area (and adjacent waters) in the last five years

Date	Species	Activity (at time of report)	Status	Damage	Location
2/08/2022	Undet.	General (swimming, feeding, etc.)	Usure if Alive or Dead	Propeller Damage (unsubstantiated by QPWS, no supporting imagery)	Dent Passage
25/06/2023	Humpback Whale	Beach Washed	Alive, left to natural processes (freed on rising tide)	Undefined anthropogenic injury (unsubstantiated by QPWS, no supporting imagery)	Pinnacle Bay, Hook Island
10/07/2023	Humpback Whale	Floating, offshore	Carcass Poor, advanced decomposition		Between South Molle Island and Planton Island
28/07/2023	Humpback Whale	Beach Washed	Alive but subsequently died	Superficial injuries of predation	Repulse Bay, Intertidal flats off Conway Beach

The fifth stranding event refers to an adult humpback whale sighted drifting offshore on 23/06/2023 outside of the Whitsunday Whale Protection Area. A notice to mariners was issued and a helicopter was dispatched by Maritime Safety Queensland (MSQ) to the area but the animal could not be located. No further information could be gathered for the reported sighting.

Post-mortem exams of animals, called necropsies, are arranged and paid for by the Department of Environmental Science when operationally feasible. Sometimes a necropsy may be warranted due to multiple animals being stranded, circumstances of the stranding being unusual, or the species being listed as vulnerable. Currently, necropsies are prioritised for dugongs, Australian snubfin dolphins, Australian humpback dolphins, and other species in accordance with Reef 2050 and DESI research priorities. Necropsies were not performed on any of the above strandings and therefore the official cause of death is reported as unknown.

Please note the following caveats with regard to this marine strandings data: The department (DES) strandings database (StrandNet) is a record of reported verified marine animal strandings and should not be considered as a record of the total strandings/mortality, but a proportion of the total. Strandings/mortality that are unobserved or unverified are not captured in the strandings database. Cause of Death/Stranding relies on the assessment of the incident and/or supporting imagery by trained QPWS staff or veterinarians.

Looking Forward

The upcoming year is likely to be full of change and growth for the Whales of the Whitsundays and our aim for the upcoming year is to reach further and engage more people to becoming stewards of whales and the marine environment as a whole.

The Whale Heritage Area Application is to be finalised in 2024, and we are confident in the outcome.

After the success of new events, the cultural Welcome Whale Event, Pre-Whale Season Information Night, and the Hydrophone Training Day, we intend to continue to foster and grow these events to engage more people.

The WoW is also interested in formalising its structure and has begun research into becoming a not-for-profit organisation.

A corporate sponsorship program has been developed to help fund projects and certifications for the upcoming year. Having corporate sponsors insures we can continue to run events and engage the community without putting financial pressure on our members.

Contact

For further information, please reach out to us at whitsundaymc@gmail.com and follow us on Facebook.



