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The Right Whale Tracker Project

Mamang

Eubalaena australis

South Coast WA
Albany to Hopetoun

Annual Report 2024

A collaboration between South Coast Cetaceans, South Coast Natural Resource Management, Oceans Blueprint and Edith Cowan University supported by funding from the Western Australian Government's State NRM Program and the Australian Government under the National Environmental Science Program.

Message from the CEO South Coast NRM


© Javier Estaban

As the CEO of South Coast Natural Resource Management (NRM), I am delighted to introduce the Right Whale Tracker citizen science project. This initiative empowers community members to actively contribute to the protection of the endangered southern right whale by helping to monitor their movements and behaviours along our coastline.

Through this collaborative project, we harness the collective power of everyday citizens to gather valuable data to improve the species' conservation outcome and engage directly with conservation-based management actions using surveys. By participating, you become a vital part of safeguarding these incredible marine mammals for future generations. Your involvement in the Right Whale Tracker project is an important step toward ensuring a healthier marine environment for both the whales and the broader ecosystem. We need many skilled eyes on the ocean which is difficult to obtain through traditional scientific ways. Your efforts are essential for overcoming this challenge.

Thank you for your commitment to this critical cause.

Luke Bayley
Chief Executive Officer,
South Coast Natural Resource Management

© Machi Yoshida

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©Raelene Smith

The Team - Staff, Scientists and Volunteers


©Chandra Salgado Kent

Laura Bird

Project Coordinator at South Coast NRM

Laura began her position as Right Whale Project Coordinator in May 2024. Through this project, she is able to pursue her passion for connecting community and science, actively engaging the public as Right Whale Tracker citizen scientists.

Kirsty Alexander

South Coast Cetaceans Marine Scientist / Esperance Marine Park Coordinator at DBCA

Kirsty is passionate about developing guidelines to make sure the marine environment is conserved. She developed South Coast Cetaceans in 2016 which has led to the formation of the Right Whale Tracker project ensuring the data collected during the project continues to inform conservation management decisions affecting southern right whales.

Chandra Salgado Kent

Professor of Wildlife and Ocean Conservation at ECU & Director of Oceans Blueprint

Chandra is a recognised expert in marine mammal ecology, applied statistics, and bioacoustics. Chandra regularly advises various government, industry and community on status, threats and management of marine wildlife, innovative research methods, and analytical approaches.


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The Team - Staff, Scientists and Volunteers

Tim Button

Steering Committee Member - Operations Officer Fauna, DBCA

Jen Bane

Steering Committee Member - General Manager Albany Historic Whaling Station

Vaughn Chapple

Steering Committee Member, Albany Marine Park Coordinator DBCA

Eileen Wheeler

Steering Committee Member, South Coast Cetacean Citizen Scientist

Citizen Scientists who submitted surveys in 2024

Javier Delgado Esteban, Valerie Mather, Fae Morgan, Terri Strong, Eileen Wheeler, Machi Yoshida, Kathleen Nikas, Annaliese Eastough, Helen Morris, Raelene Smith, Albany Ocean Adventures, King George Sound Safaris and Albany Whale Tours.

Purpose of the Project

Why we care about Southern Right Whales

Australia has a clear obligation to protect and conserve southern right whales. They are listed as endangered species through the -

- EPBC Act 1999 (Commonwealth legislation)
- Western Australian Biodiversity Conservation Act 2016 (State legislation)

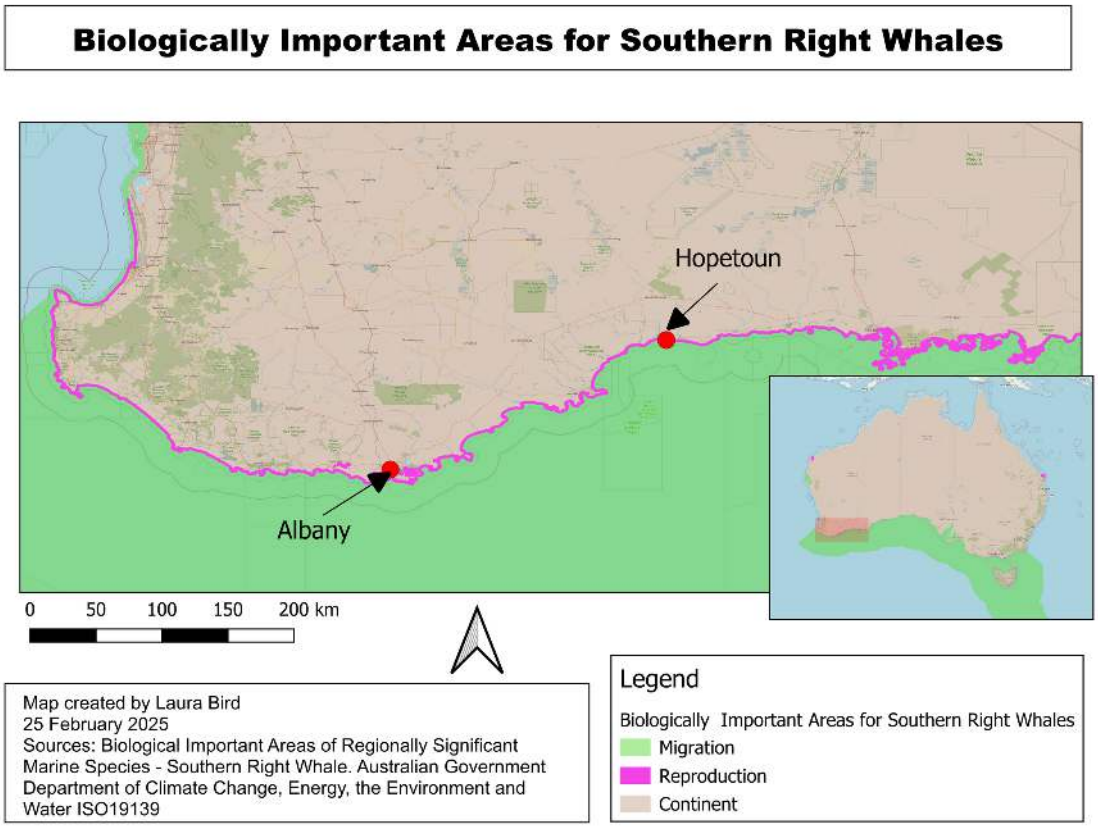
It is estimated that 250yrs ago, there were over 70,000 southern right whales globally. This number dropped to approximately 300 in the 1920s due to whaling.

The Australian populations consist of two recognised sub-populations which in the 2022 annual aerial survey estimated these populations to be:

2675 individuals in the western sub-population

268 individuals in the eastern sub-population

Smith, J., Double, M., Evans, K., & Kelly, N. (2023). Relative abundance of the 'western' population of southern right whales (Eubalaena australis) from an aerial survey off southern Australia. Marine and Coastal Hub. https://www.nespmarinecoastal.edu.au/wp-content/uploads/2023/10/Project-2.7_FINAL-REPORT.pdf



Fun Facts


© Albany Ocean Adventures

Key challenges for southern right whales are these traits:

- **Living long lives:** The median life span of a southern right whale is 73.4yrs [1]
- **Late sexuality maturity:** minimum 5yrs and average 9yrs old to give birth.[2]
- **Low reproductive output:** 1 calf every 3-5yrs.[3]
- **Gestation:** 11-12 months.[4]
- **Lactation:** lasts 7-8 months.[5]

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(1) Breed, G. A., Vermeulen, E., & Corkeron, P. (2024). Extreme longevity may be the rule not the exception in Balaenid whales. Science Advances, 10(51), eadq3086-. https://doi.org/10.1126/sciadv.adq3086

(2) Charlton C, McCauley RD, Brownell Jr RL, Ward R, Bannister JL, Salgado Kent C & Burnell S (2022) Southern Right Whale (Eubalaena Australis) Population Demographics at Major Calving Ground Head of Bight, South Australia, 1991–2016. Aquatic Conservation: Marine and Freshwater Ecosystems 32, 4, 671-686. DOI: https://doi.org/10.1002/aqc.3771.

(3) Charlton, C 2022, https://research.curtin.edu.au/news/decades-long-study-finds-endangered-whales-are-having-fewer-babies/?type=media

(4) Burnell SR (2001) Aspects of the Reproductive Biology, Movements and Site Fidelity of Right Whales Off Australia. J. Cetacean Res. Manage., 89-102. DOI: https://journal.iwc.int/index.php/jcrm/article/view/272.

(5) Tormosov DD, Mikhaliev YA, Best PB, Zemsky VA, Sekiguchi K & Brownell RL (1998) Soviet Catches of Southern Right Whales Eubalaena Australis, 1951-1971. Biological Data and National Recovery Plan for the Southern Right Whale (Eubalaena australis) 94 Conservation Implications. Biological Conservation 86, 2, 185-197. DOI: https://doi.org/10.1016/S0006-3207(98)00008-1.

These make them vulnerable to human threats such as:

- **Vessel /Whale Collision**
- **Underwater Noise**
- **Marine Debris**
- **Entanglement**
- **Climate Change**


© Laura Bird

Target Project Outcomes

May 2024 saw the commencement of the Right Whale Tracker Project - a program that draws from the experience and passion of community, volunteers and whale watch operators supported by funding from the Western Australian Government's State NRM Program.
This program is delivered through a collaboration between South Coast NRM, South Coast Cetaceans and Oceans Blueprint. South Coast Cetaceans, developed by Kirsty Alexander, has been engaging volunteer citizen scientists to gather data, assisting in informing management strategies for coastal development along the South Coast since 2016. The Right Whale Tracker project will continue collecting this baseline data for the next 2 years, of which photo processing is being supported by ECU's National Environmental Science Program (NESP) Project 3.15, and in-kind support from the Department of Primary Industries and Regional Development (DPIRD) through the use of and data access from the Marine Fauna Sighting App for Right Whale Tracker surveys. The project has the following key outcomes:

- **Raise Awareness**: Increase awareness about southern right whales, including threats from human impacts.
- **Fill Critical Knowledge Gaps**: To improve the species' conservation outcome and increase regional understanding of southern right whale populations.
- **Recruit Participants**: Attract a diverse group of volunteers to contribute data.
- **Build skills and knowledge:** Through engagement with citizen scientists build monitoring skills and understanding of scientific method and southern right whale ecology.
- **Foster Engagement**: Maintain high levels of participant engagement through regular updates and feedback.
- **Share Findings**: Disseminate project progress and results and successes to showcase the impact of participants' contributions to improving management as coastal pressures increase.

Activities to Date


© Jenny Morris

DJILBA

August

- Project Inception workshop

September

- 2 Introduction workshops in Albany & Hopetoun

KAMBARANG

October

- 2 Indigenous consultation sessions at Cheynes Beach
- Marina Fauna Sighting app session at Emu Point
- 39 land based & 3 vessel based surveys

November

- Presented at the Threatened Species Forum Albany

BIRAK

December

- Developed the Training Toolkit for citizen scientists
- Processed whale images leveraged through NESP project 3.15 for ARWPIC

Project Summary 2024


© Kathy Nikas

In 2024 the project developed and facilitated the following:

- Community Engagement and Communication Plan
- Monitoring Framework
- Memorandum of Understanding with collaborators Ocean Blueprint and South Coast Cetaceans
- 2 x Data Agreements with Department of Primary Industries and Regional Development and Edith Cowan University
- Citizen Science Training Toolkit Manual
- 2 x Introduction workshops in Hopetoun and Albany with 83 participants
- 3 x Indigenous Consultation with 21 attendees across 3 ranger groups
- 3 x Steering committee meetings with 7 members

Over 2 months 13 volunteers conducted:

- 3 boat surveys
- 39 land surveys
- Of which 9 were carried out using DPIRD's Marine Fauna Sighting app

Photos processed for uploading to the Australasian Right Whale Photo Id Catalogue (ARWPIC) leveraged through the National Environmental Science Program (NESP) Project 3.15, include:

- 59 photos from citizen scientists in 2 months
- 25,618 photos taken since 2004 have been reviewed and processed, from which 213 individuals have been identified. Of these, 112 individuals have been compared across years to identify whether any had returned in different years. So far, 4 individuals have been confirmed returning in a different year.

Processing and matching of photos continues to be in progress.

Thank you all who participated in 2024, we look forward to continuing our partnership with you during 2025 and identifying some return whale individuals.

Citizen Scientist Project Stats

Total Surveys

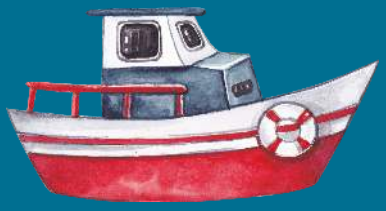
42

Land based Surveys

39

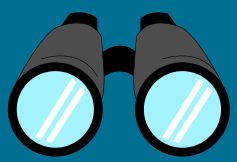
Vessel based Surveys

3



Marine App Surveys

10



Photos Processed

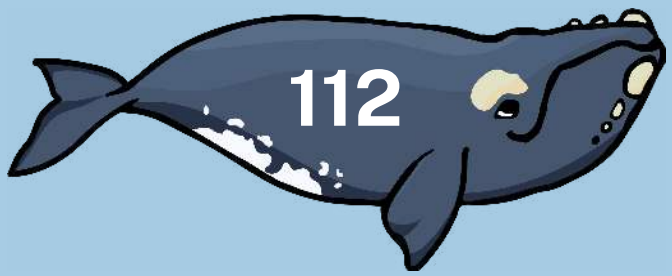
Historic Citizen Scientist photos from 2004

25,618 photos

Citizen Scientists photos 2024

59 photos

Individuals identified in King George Sound 2004-2020



Sightings data and photo matching identifies important Southern Right Whale aggregation areas along the South Coast between Albany and Hopetoun in WA

Engaging Citizen Scientists

3 Whale Tour Boat Operators

64 Albany

22 Indigenous Rangers

74 Participants attending information sessions

10 Hopetoun

Citizen Scientist Profile-Kathy Nikas

Hi, I'm Kathy Nikas based in Albany. Growing up in Albany I was lucky enough to observe whales from a young age. I have always loved and been fascinated with the ocean, which led me to complete a degree in Marine Science at UWA. I am currently completing my honours project in Albany with a focus on whales. Through my studies I have met many like minded people; leading me to volunteer with a number of citizen science projects including ring-tail possum tracking, community engagement and the Right Whale Tracker Project.

My most memorable interaction with a southern right whale was on the rocks by the lagoon at Nanarup beach. A mother and calf glided past the rocks, so close I swear I could feel the spray from their blows.

I enjoy photographing all wildlife, though I can never have enough photos of whales. A few years back I took a trip to Africa and purchased a camera with a powerful zoom, and was rewarded with some stunning wildlife shots. This camera is the one I use when volunteering for the Right Whale Tracker Project. It allows me to take multiple shots per second and the clarity is perfect for identifying individual whales.

The southern right whales that visit our coast have certainly roused much interest from the local and global community. Just sharing the knowledge that this species utilises our coast as a nursery and breeding ground is vital to their conservation. Sharing our knowledge and understanding of these whales, helps to inform policy and conservation measures; I am so proud to play a small role in protecting this endangered species.

Going forward, I will remain in Albany and will continue to contribute to our collective knowledge of the southern right whale, and hope to be involved in many other citizen science projects involving all species. Everyone can play a role in protecting our biodiversity, though it may seem that the role you are playing is small, every effort counts. By building our knowledge base of species' movements and habitat use, policy makers and planners can make sound and informed decisions, achieving better outcomes for our endangered species.

Next Steps

We will be collecting more data this whale season to identify southern right whale aggregation areas along the south coast and identify individual whales to learn who is visiting and possibly revisiting to have their calves.
Right Whale Tracker citizen science training courses will be run in May for volunteers interested in getting involved.
If this sounds like you please contact us for more details

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A collaboration between South Coast Cetaceans, South Coast Natural Resource Management, Oceans Blueprint and Edith Cowan University supported by funding from the Western Australian Government's State NRM Program and the Australian Government under the National Environmental Science Program.

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