

# ORCA Times

ORCA Foundations End of Year Newsletter



OCEANRESEARCHCONSERVATIONAFRICA  
INTELLIGENT CO-EXISTENCE



RESEARCH | CONSERVATION | EDUCATION

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## RESEARCH

The latest research addition to the ORCA Project is the **Stingray BRUVS Study in the Keurbooms River.**

Since March this year, the ORCA team worked together with Dr Chantel Elston, a postdoctoral researcher from the South African Institute for Aquatic Biodiversity, to set up an exciting new study on the Keurbooms estuary. Using something called a Baited Remote Underwater Video System (or BRUVS for short), this project aims to learn when, where and why stingrays occur in this estuary. Many stingrays are considered at risk for extinction, so determining important habitats for them, like possibly the Keurbooms estuary, is important to their conservation. The BRUVS rig is deployed every week in the estuary and a GoPro attached to the rig records fish presence for one hour. Using this technique, 3 different species of stingray have been identified in the estuary, but by far the most common is the common eagle ray, a critically endangered species. This project will run for another year and a half and we know there will be exciting and important results at the end of it.



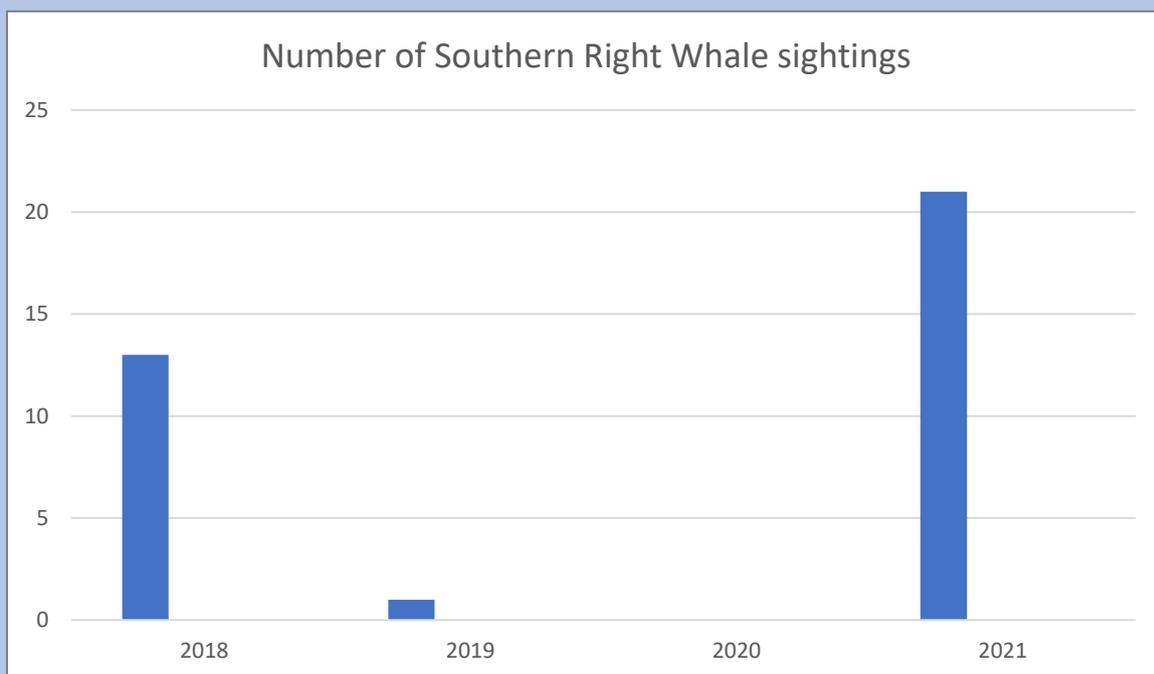
## Opportunistic cetacean sightings with Ocean Blue Adventures

Over the year we conducted **62** opportunistic trips with Ocean Blue Adventures (OBA) to collect data on Plettenberg Bay's marine life. During those trips we recorded a total of **90** cetacean sightings.

The majority of cetacean sightings in 2021 were of Bottlenose dolphins, followed by Southern Right whales and Humpback dolphins. Some other interesting sightings include Hammerhead sharks, Mola Mola (sunfish) and African Penguins which are currently listed as endangered on the IUCN red list.



**Southern Right whales make an appearance.** When comparing the data collected by volunteers from OBA trips, during the previous 3 years we see a significant increase in Southern Right whale sightings in 2021 (as seen below). Each sighting could consist of between 1 – 8 animals.



According to the 2021 Southern Right Whale Aerial survey South Africa that took place between the 3<sup>rd</sup> and 5<sup>th</sup> of October by the MRI Whale Unit, the number of whales still remains well below what we would expect under 'normal conditions' although the numbers have increased since 2019.

Southern Right whales can grow up to 16m in length and weigh up to 60 tonnes. This is the equivalent weight of 10 African elephants. These whales are identified by their V



shaped blow, lack of dorsal fin and the callosities on their face. They tend to give birth every 3 to 4 years and this could explain why we are seeing a 2-year gap in migration patterns in Plettenberg Bay. They migrate from the cold sub-Antarctic Southern Ocean waters to the warm coastal waters of South Africa where they mate and give birth.

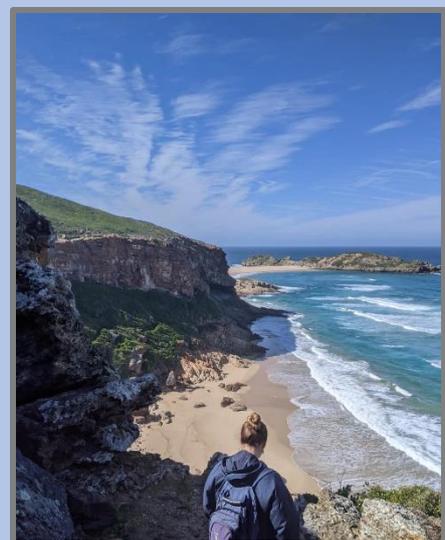
The Southern Right whales got their name because they were known to be the right whales to hunt. They are very slow moving, float when they are dead and have a very thick layer of blubber that the whalers were after.

Since hunting ceased, their population has grown by 7% a year on average.

## Robberg MPA land-based observations

Between January and December ORCA volunteers assisted with **53** dedicated observational sessions from cliff-top monitoring sites located along the Robberg Peninsula hiking trail. This equated to a whopping **112** hours of observations during which a total of **45** white shark sightings were made by individual volunteers. Although no predation attempts on Cape fur seals were recorded, we know this does not mean sharks are never successful; they stick around for a reason!

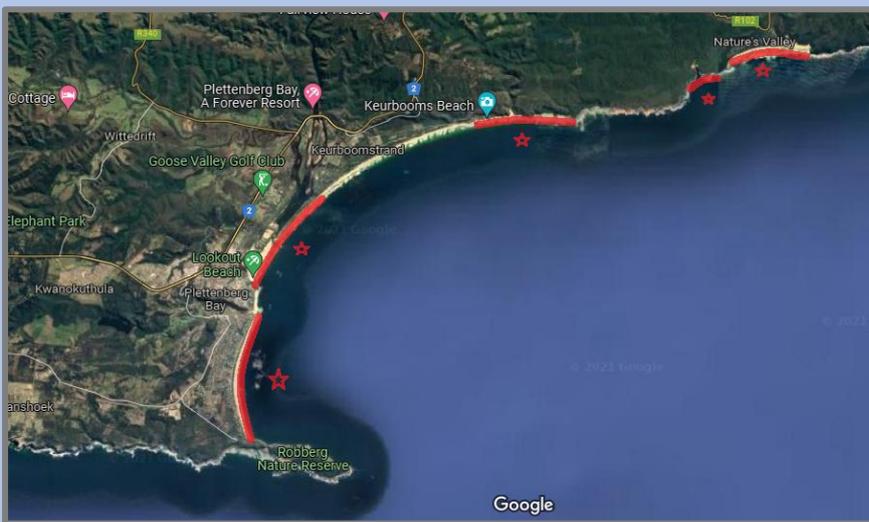
Solo – the vagrant southern elephant seal that has been visiting Plett since 2016 has been sighted from Robberg Peninsula again throughout the year, and boy, has he grown! Elephant seals usually reach maturity at 5-6 years old but generally do not achieve alpha status until the age of 8. Will Solo return home to the sub-Antarctic waters to breed? We will have to wait and see. For now, he seems to be living happily amongst the Cape Fur Seal colony and comes and goes as he pleases.



# CONSERVATION

## Shark egg-case hunting with ELMO

The ORCA volunteers walk the beaches between Plettenberg Bay and Natures Valley in search of shark egg-cases weekly. In search of these egg-cases we record when and where they are found. This assists in providing long-term data on South African elasmobranchs (sharks, rays and skates) and promotes awareness around important endemic elasmobranchs. Below is an image that indicates the beaches that ORCA volunteers do dedicated egg-case hunts. Natures Valley and Salt River have proven to be the most abundant and diverse areas for shark egg-cases.



The Southern African coastline has the 4th highest number of sharks, rays and skates in the world but unfortunately about 30% of these species are at risk for extinction and this is why we need your help!

ELMO is a citizen science project using public participation which means ANYONE can participate. Whether you are a snorkeler, diver, swimmer, skipper, angler or a beach walker, you can assist by reporting your sighting or find to ELMO.

If you spot an elasmobranch or find an egg-case, you need to record three simple things:

- |                    |                     |                         |
|--------------------|---------------------|-------------------------|
| 1.<br>take a photo | 2.<br>note the date | 3.<br>note the location |
|--------------------|---------------------|-------------------------|

You can then Whatsapp the information to +2776 897 5474.

## Beach clean-ups

This year our volunteers have conducted a number of beach clean-ups along Plettenberg Bays beaches.

Central beach has been found to be the beach where the most cigarette butts, straws and eating utensils are found while the Lookout Rocks proceeds to have a big problem with fishing gear that has been abandoned by fishermen, accompanied with broken beer bottles.



We were excited and proud to have taken part in **The Great Global Nurdle Hunt** in October this year.

Nurdles are plastic pellets used by industry to make nearly all our plastic products. Accidental spills result in large numbers of nurdles being washed out to sea. While at sea, nurdles can attract and concentrate background pollutants to toxic levels and can be mistaken for food by many animals and thus entering the food chain.



Throughout October, individuals, schools, communities, and organisations from 23 countries headed outdoors to hunt for these polluting plastic pellets. This year's hunt has been bigger and better than ever.

The Orca Foundation managed to collect more than **10,000** nurdles in the month of October only! We are more than grateful to be able to make a difference regarding such an urgent matter that affects our coastline.

# EDUCATION

## The Ocean Experience

This year the ORCA Foundation introduced a new program into the schedule. The Ocean Experience is an introduction to the art of free diving in hopes of creating a connection with yourself and nature. The following infographic demonstrates the steps we go through to achieve this goal.

**THE ART OF FREEDIVING**

- The Mammalian Dive Reflex
- Breath Holding
- Safety Underwater

**PRACTICE**

- Become comfortable in the water
- Expore Personal Limits
- Buddy System

**EXPLORE THE UNDERWATER WORLD**

- Plettenberg Bay has a variety of shallow house reefs to explore

**DEVELOP A RELATIONSHIP WITH NATURE**

The feeling of...  
*Bliss*  
*Love*  
*Connection*

**BECOME FAMILIAR WITH THE UNDERWATER ECOSYSTEM**

- Appreciate the unique marine biodiversity

**HEALTH BENIFITS**

- Relieve Stress
- Relax your muscles
- Improve Blood Circulation
- Mindfulness

## Planting seeds of sustainability at Siyakhula Creche!

During summer of 2020, the Orca Foundation began planting not one, but 3, vegetable gardens in and around the school. The garden is part of the food security for the school programme with the aim of assisting Siyakhula in growing and maintaining a sustainable food garden. We want to teach children and teachers how to keep sustainable gardens that will always help them in the future. If the school is able to keep this garden sustainable, they will have a chance to reap the vegetables. We visit once a week for upkeep of the garden and assist with harvesting of vegetables. At Siyakhula, spinach and potatoes are strong favourites, with seasonal carrots and peppers.



## TESTIMONIALS

“My time at orca foundation as a volunteer for marine conservation was unforgettable. We were a cool team, all working together, achieving something good with new friends. But the best part was spending so much time on and in the water. I never thought that I could ever feel so connected to the ocean as I do now. We went on boat trips, documenting dolphins, seals and whales. I will never forget that day we went out and were surrounded by hundreds of common dolphins... A feeling you have to experience, because no words can describe that moment! During my stay I had a couple of moments like this, whether it was our free diving lessons, snorkelling, shark egg case hunting on beautiful beaches like nature’s Valley, or even the Robberg observations, where you start your day with a beautiful hike to observe the seal colony. They are all memories I’ll never forget. When you are lucky enough, you can even spot sharks and rays during the observations. And that is by far not all! I extended my stay for 2 more weeks, and the lovely team was a big part of that decision. I just had the best time, learning from the team and support wherever I could!”

### – Franzi Arens

“Being part of the Orca Programme was one of the best experiences ever. I’ve learned a lot about the nature and ocean life and I met wonderful people. We did so many different amazing activities and every day was exciting and meaningful to me. I truly think that I’ve got to know myself better which was one of the best things I could have asked for and could have expected. I would have loved to stay longer and without hesitation I would recommend it to anyone :). Thank you for everything!”

### – Amalia Beveridge

“My experience working with Orca foundation as a volunteer was truly an amazing adventure. I was welcomed by a lovely team that took great care of me during my stay and showed me the beauty of the ocean, marine wildlife, the importance of conservation and all the amazing things Plett has in store. During my stay of 3 weeks, which in the end became 4 weeks, I went on boat trips, enjoyed the presence of whales, seals and dolphins, went shark egg case hunting in Natures Valley, enjoyed snorkelling, watched the moon rise from the ocean, hiked Robberg, was very proud of our harvest of potatoes at the Siyakhula Preschool, chilled on the beach, had a couple drinks, went to Surfies afterwards and had a couple more drinks (Tequila?); all in all, my time was unforgettable. I’ve been back for a couple of weeks now and I really do miss everything, the people, the work, the ocean and the vibe in general - extremely grateful for every moment; moments that no-one can take away from me!” – **Isle Kool**

From all of us here at ORCA, we would like to say a huge **THANK YOU** to each and every volunteers who contributed their time to assist with our work in 2021. We appreciate your motivation and hard work to help further our projects, sometimes during physically and mentally challenging conditions. The success of our projects would not be possible without your contributions.



*Written and photographed by Melissa Nel*