



ORCA

OCEANRESEARCHCONSERVATIONAFRICA
I N T E L L I G E N T C O - E X I S T E N C E

2021 VOLUNTEER PROGRAM ORIENTATION GUIDE



Welcome to the **ORCA Foundation**! This booklet answers most questions about our volunteer program and explains everything you need to know to make your stay as comfortable and enjoyable as possible.

Developed by
M. Nel and L. Bakker

OUR MISSION



To raise awareness and interest in marine conservation issues facing Plettenberg Bay

To support applied marine research that informs conservation management decisions with scientific advice

To install a sense of community and support by collaborating with other conservation organizations and research institutes in the region

To expose international volunteers to local marine research, conservation and education initiatives

To teach young children about the value of our oceans



OUR TEAM



Jared Harding
Programme Manager

Jared will make sure that you arrive safely in Plettenberg Bay. He will assist you with all your travel, transfer and other logistical arrangements. Although more involved with the marketing and budget control aspects of the programme, Jared has loads of experience in seabird conservation and rehabilitation. He is an avid diver and qualified marine guide. Jared received his National Colours in scouting and spent 13 months on sub-Antarctic Marion Island to collect data on seabirds for the Department of Environmental Affairs.

DR Chantel Elston
Researcher and Research Program Coordinator

Chantel grew up in Cape Town, South Africa and has been intrigued by the ocean her whole life. She always wanted to pursue a career in marine science, so she completed her undergraduate in Marine Biology and Ecology and Evolution at the University of Cape Town. Chantel then realized her love for research and carried on with both her Master's and Doctoral degrees at Rhodes University, specializing in stingray dietary and movement ecology. She has a strong research background and has published a number of peer-reviewed scientific articles and has attended both local and international conferences to present her work. Chantel also has experience working in conservation; she worked as a scientist for an NGO in the Philippines where she surveyed coral reef biota to provide biologically relevant recommendations for the designation of Marine Protected Areas. Chantel is passionate about education and outreach and has engaged with the public on a variety of platforms to share her knowledge and passion of the ocean.





Melissa Nel
Oceanographer & Research Assistant

Melissa joined our team to assist with the research, conservation and education aspects of our program. She is a passionate ocean lover and as such has always wanted to protect this essential part of nature. This led her to pursue her interest at the Cape Peninsula University of Technology where she obtained a BTech degree in Oceanography. Since then she has worked on Heaviside's dolphins with the Namibian Dolphin Project, sailed with the SA Agulhas II to Antarctica to assist with oceanographic data collection and to Tanzania as marine mammal observer to help record sightings. Another highlight of Melissa's career to date is her work on turtle rehabilitation at the Two Oceans Aquarium in Cape Town. During her time there she developed a special love for these beautiful animals that are so dramatically affected by the human race's disregard for plastic pollution in the oceans. Melissa has also pursued Scuba diving to further her career in protecting our oceans and currently has Rescue Diver certification with an end goal of obtaining Dive Master status. For leisure she pursues surfing & free-diving. A real water baby!



Laura Bakker
Volunteer Coordinator

Our people-loving and enthusiastic volunteer coordinator will make everybody feel right at home while looking after your wellbeing and coordinating your activities. With a BTech degree in Nature Conservation, Laura also runs our conservation and educational project



Teliswa Fuyani
House Mother

Tilly is our experienced housekeeping executive, affectionately known as 'Mom', and keeps your home away from home easy to live in, including doing laundry and cooking delicious, healthy meals. 'Tilly' has been working at the ORCA Foundation for over 11 years.

PROGRAM OVERVIEW

The ORCA Foundation, a conservation node of Ocean Blue Adventures was designed to create awareness about marine conservation issues facing Plettenberg Bay. The foundation combines research, conservation and education into its comprehensive volunteer program. The foundation strongly depends on the willingness of international volunteers to contribute their time and dedication to help further our work. Volunteers of different ages and backgrounds come from all over the world to learn and provide valuable assistance in a wide variety of meaningful projects. This allows them to make a valuable contribution to increased knowledge and awareness regarding local conservation efforts.

How will I help?

It's all hands-on! You will play a major role in all our projects where you will be expected to perform a large portion of the work. Your participation in conservation and education projects will include a range of hiking, responding to strandings and visiting the local schools.

We are involved in a number of marine research projects which are perfect for individuals who are interested in marine mammal research. By assisting our biologists in the field, you will gain valuable experience in boat-based and land-based field research methods involving some of Plettenberg Bay's charismatic marine top predator species.



The level and extent of your participation.

Depending on the length of your stay, you may or may not participate in the full range of activities. If your stay exceeds 2 weeks and you have achieved a level of experience that is satisfactory to our team, you may be asked to take on more responsibility in certain projects and even train or supervise new volunteers.

You will be exposed to challenging work conditions.

While assisting our biologists during boat-based fieldwork you may be required to move around the vessel whilst underway, sometimes in choppy conditions. Seasickness is a possibility and we suggest you take the necessary precautions if you think you may be prone to this condition. Hiking out to work sites, clearing alien plants or performing tedious behavioral observations from cliff-top vantage points can be physically demanding and mentally challenging. However, we do realize that every volunteer has their own physical and mental capabilities, and therefore won't expect you to venture beyond your limits. It is important to notify the volunteer coordinator at the start of your stay if you have any disability, injury or condition (especially fear of heights) that may affect your participation in some of our more challenging fieldwork activities.



You will need to be patient with the weather-dependent nature of fieldwork.

You will need to be prepared for regular last-minute changes in the pre-planned work schedule. It is important to understand that most of our projects are highly weather dependent, especially boat-based fieldwork. Bad weather days will be used to catch up on data entry and other database tasks. Opportunistic research on Ocean Blue Adventures whale and dolphin watching boat trips may also be cancelled or delayed depending on available space and last-minute tourist bookings. Marine mammal strandings often occur without warning. Events involving fresh carcasses or live animals ashore require immediate response and therefore take priority over all other activities. When we receive a report of a marine mammal ashore, we often drop what we are doing and rush out to investigate as data and samples collected from stranded animals are very valuable for research.

ORIENTATION & TRAINING

No previous experience is required to participate in any of our projects. It is however recommended that you have the following qualities in order to make a valuable contribution:

- General interest in marine biology, research, conservation and education
- Enthusiastic, positive, mature and independent attitude
 - Willingness to learn and work well within our small team
- Adaptable and patient due to the weather dependent nature of fieldwork
- Ability to work long-hours on small vessels
- Moderate fitness level to hike long distances in the field
 - Attention to detail
- Willingness to perform tedious behavioral observations
 - Willingness to perform tedious data entry duties
- Ability to communicate fluently in English (both written and oral)

Once you have arrived and settled into the ORCA house, our volunteer coordinator will give you a brief orientation of the program. Details of the purpose and importance of each project can be found in this guidebook but will also be explained further during in-field training.



WORK SCHEDULE

Due to the weather-dependent nature of our work, we plan each week's activities the weekend before. Once the schedule has been finalized the volunteer coordinator will write the program on the activity board in the dining room.

The standard volunteer working week at the ORCA Foundation is Monday to Friday, from 08h00 to 17h00, except on a Friday afternoon when we often finish at 13:00 (but not always). Some days can involve more work and longer hours, while others move at a more leisurely pace. You are expected to be ready at the time specified on the volunteer Whatsapp group the night before. Evenings and weekends are your leisure times. The relaxed atmosphere of Plettenberg Bay and the ORCA Foundation house will help you to settle in quickly.

Table 1. Example of a typical weekly program

Monday	Tuesday	Wednesday	Thursday	Friday
08h00-12h00 Beach Clean-up (Group 1) 18h00-12h00 Boat-based Observations/ Aquarium Maintenance and Prawn Pumping (Group 2) 13h00-17h00 Robberg Observations (Group 1) 14h00-16h00 Data Entry (Group 2)	08h00-12h00 Alien Clearing 13h00-16h00 Beach Clean-up	08h00-12h00 Alien Clearing 13h00-17h00 Estuary Survey/ Tree planting	06h00-16h00 Humpback Dolphin Survey (Group 1) 08h00-12h00 Siyakula Creche (Group 2) 13h00-16h00 MiniSASS (Group 2)	09h00-12h00 Knysna Animal Welfare Shelter

RESEARCH

OVERVIEW



The ORCA foundation runs a number of different research projects; these projects are 'applied' in nature, meaning that the data we collect can directly assist in the conservation of the environment and its inhabitants. As a volunteer, you will gain hands-on experience working in the marine environment and you will regularly assist our research team in boat-based and land-based fieldwork. Our current research efforts focus on whales, dolphins, seals, sharks and rays. The specific projects we run are detailed below, whilst with us you will assist in some or all of these projects.

PROJECTS

Opportunistic boat-based surveys with Ocean Blue Adventures

You will join Ocean Blue Adventures on their commercial whale and dolphin watching boat trips when seats are available. During these trips you will record sightings of marine animals (such as whales, dolphins, seals, sharks and seabirds) and take photos of dolphin/whale dorsal fins and other interesting sightings. This adds to a long-term data set that helps us to determine the distribution and movement of these animals, as well as monitoring their population health, human-wildlife interactions, and other important ecological information.



Opportunistic boat-based surveys of Cape Fur seals in the Keurbooms estuary

You will undertake boat trips on the Keurbooms estuary for a variety of purposes. Whilst on the estuary you will look out for the presence of Cape Fur seals. When these individuals are spotted, you will help to record their presence and

behavior and take photos of their flippers. As this species does not usually occur in estuarine systems, this data will help reveal which individuals are occurring in the estuary, whether they have specialist feeding habits here, and what influences their behavior.

Cliff top monitoring of marine wildlife from the Robberg Peninsula

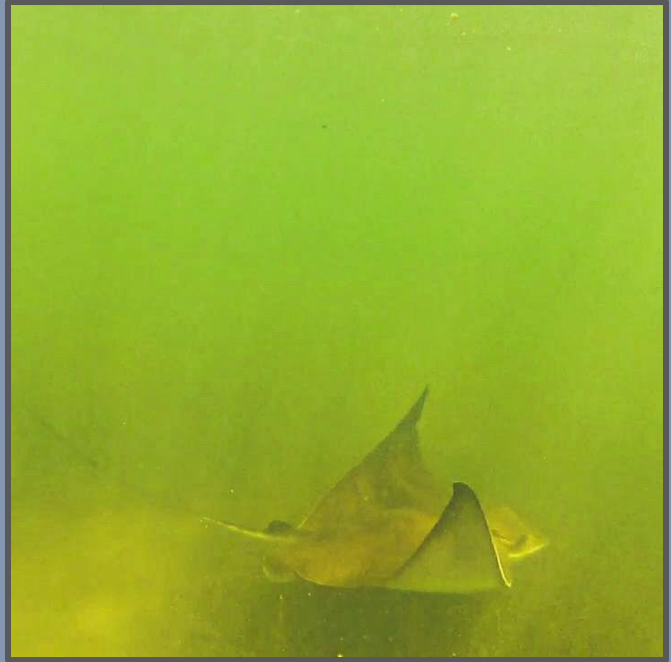
You will regularly hike out on Robberg Peninsula to perform dedicated observation sessions from designated cliff-top monitoring sites. From here you will record environmental conditions and the presence and behaviour of seals, sharks, whales, dolphins, tourism vessels and shore anglers within the Robberg Marine Protected Area. Your information will be used to monitor seal-shark



interactions and the importance of the marine protected area to marine mammals and the tourism industry. The hike can be strenuous to some, and certain sections are not suitable for those who have a serious fear of heights.

Shark and ray video monitoring

While on opportunistic whale and dolphin watching boat trips and on estuary boat trips, you will help to deploy a camera system (called a Baited Remote Underwater Video System or BRUVS for short). This camera system will record all of the underwater species that pass in front of the camera field-of-view. You will also assist in screening the collected video footage for the presence of sharks and rays. This data will help determine which shark and ray species are present in the area, and what influences their presence and behavior. This is important information to try and conserve these vulnerable species.



Shark and ray egg case hunting

Many species of sharks and rays lay eggs, the empty cases of which often wash up on shore. You will perform dedicated beach-based surveys to look for these egg cases. You will also assist in the preparation, identification and measuring of these egg cases. This will add to a long-term data set that will also assist in determining which and when shark and ray species are present in the area, assisting in conservation efforts.

CONSERVATION



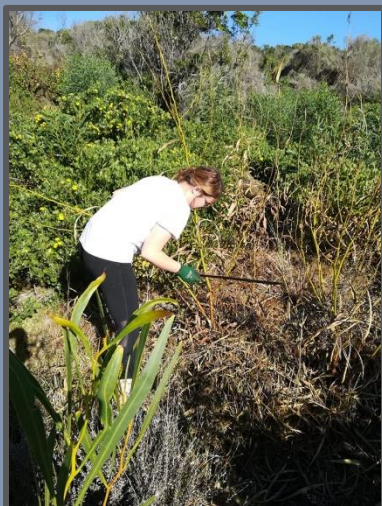
Beach Clean-Ups

We regularly hike along Plettenberg Bay's beaches to clean up marine debris. Unfortunately, we live in a world where people still dispose of their rubbish from vessels, in rivers or on beaches. This often causes deadly entanglement of marine animals. Tiny plastic particles (micro-plastics) are also known to end up in the ocean food-chain. This project not only

keeps our beaches clean and healthy, but also sets a good example for the community. We also use the opportunity to record our findings, which gives us indications of where the garbage is coming from and where it appears most frequently.

River Health Evaluation

As part of a citizen science project we perform mini-SASS river health assessments at various sites along the Bitou River. In order to complete an evaluation, the river needs to be sampled for micro-invertebrates. These species are then identified and scored on a matrix according to their sensitivity to disturbance. Results will allow



management authorities to identify early warning signs of decreasing river health due to various potential sources of pollution. The results which are obtained from the evaluation are fed into the online MiniSASS database, where the history of the river's health can be accessed by the public.

Alien Plant Eradication

One of the ORCA Foundation's goals is to remove as many alien plant species as possible from the Plettenberg Bay area. These species are not compatible with our natural vegetation and are known to use a lot more water resources than our indigenous plants. South Africa is short of rainfall and

this inevitably leads to drying out of rivers and a decline in local biodiversity. In conjunction with other organizations we often head out into the surrounding areas to help remove problem species – sometimes removing as many as 300 trees in one day. We are currently removing the alien species *Acacia saligna* (Port Jackson) which is a native of Australia and was introduced into South Africa for dune stabilization. This can be a tiring and physically demanding task especially when done in the heat. Please be prepared for this by wearing a hat and sunblock. Also note that this activity will not be done for longer than two hours a day.



Ecobricks

At the beginning of 2019, we started our Ecobrick project, a method we are using to help us in reducing the amount of non-recyclable materials we are introducing into the environment. These non-recyclable materials include polystyrene trays, silver packets such as chip and chocolate wrappers, just to name a few. An ecobrick is a plastic bottle which is stuffed full of waste which is not biodegradable, a completed ecobrick can weigh between five hundred and six hundred grams. They can then be used as a brick to help with the building of structures and furniture. All the ecobricks which the ORCA Foundation produces will be donated to community projects in Plettenberg Bay who require them. A box is kept in the kitchen whereby we collect all the materials needed to make the ecobricks.

Snorkeling

Snorkeling is the underwater observation and study of animals in flowing waters. We use this time underwater as an opportunity to observe, assess and clean the water and environment that provides us with the chance to do research and conserve. While snorkeling in our estuaries and inshore reefs we look at fish abundance, distribution and habitat use. We also remove any pollution seen during the swim, specifically keeping an eye out for fishing gear such as fishing line, hooks and sinkers. Snorkeling is a great tool for us to use to experience priceless moments in the blue world.



EDUCATION

Siyakula Pre-School Education



Once a week, volunteers visit young children at the local crèche to give a lesson on basic English words based on the theme of the week. All teaching is done in English (translated by the teachers into their mother tongue of isiXhosa) so that kids can learn a second language. It has been proven that getting the information to people at an early age you are helping to enhance their cognitive function of their brain. This is

important as this is the learning phase when children are able to start identifying things, and thus we can help make a difference in their lives. Volunteers also train children through reading stories and playing games. They further assist the crèche by serving children lunchtime meals and washing up. The children at the creche absolutely love it when volunteers visit them and they literally shower you with lots of hugs and affection.

Sterreweg Special Needs Pre-School

Volunteers occasionally spend time assisting carers at a local crèche during daily activities involving children with moderate to severe cognitive and physical disabilities. Volunteers may also participate in an Early Intervention Program for children between 1 and 3 years old or shadow Occupational Therapists and

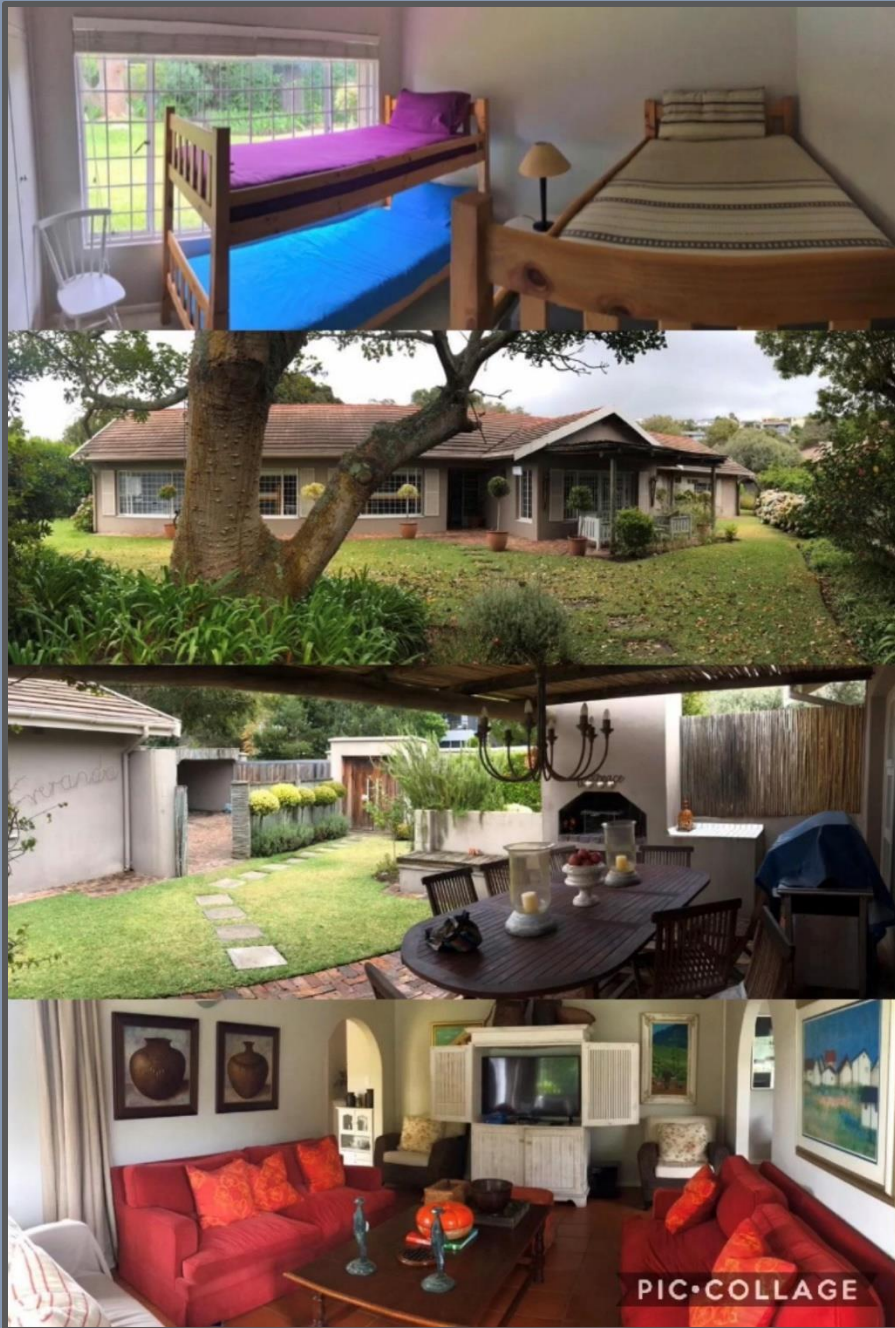


Physiotherapists who work at the Centre. Volunteers are more than welcome to help out at the school whenever they prefer, but this must please be pre-arranged with the program manager.

Other activities include, but are not limited to:

- **Aquarium Maintenance**
- **Knysna Animal Welfare volunteering**
- **Lunchbox Theatre viewing**
- **Fieldband Foundation participation**

ACCOMODATION



Laundry facilities are available and your 'House Mom', Tilly, does communal washing several times a week to conserve energy and water.

Basic food for healthy meals is provided for you at the house. You may be required to pack a lunch for some activities, but the Volunteer Coordinator will inform you of the work schedule ahead of time. Evening meals are prepared for you 5 nights per week (Mon-Fri). We do cater for a variety of diets including vegetarian. Alternatively, you are welcome to eat out at your own expense. The ORCA house is located within easy walking distance to a small shopping center with a convenience store, pharmacy and a variety of restaurants. It is also in walking distance of the main street in town.

HOUSE RULES

Upon arrival at the ORCA house you will receive a hard copy of the house rules. You are expected to read through the document and follow the rules during your stay. If the rules are not followed there will be consequences and you may be asked to leave the program.

TRANSPORT

We will transport you to programme activities in the ORCA Foundation combi, which seats a maximum of 10 people. Rental cars and taxis are available for your evening and weekend activities (at your own expense), ranging from economy to premium class.

COMMUNICATION

We suggest acquiring a local mobile from one of SA's "pre-paid" options (Vodacom, MTN, Cell C, Telkom and Virgin), which are inexpensive, to be used to communicate with our volunteer coordinator.

There is Broadband internet access at the volunteer house, with Skype available. You are welcome to use your own laptop or tablet, as the ORCA house is equipped with free wireless internet.

Communication is key as you need to be aware of the day to day planned activities. The volunteer coordinator will communicate the weekly schedule at the beginning of each week by listing planned activities on the activity board in the dining room. You will also be added to the volunteer WhatsApp group where you will receive final confirmation of each day's planned activities the evening before. Bear in mind, planned activities often change due to the weather dependent nature of fieldwork and unpredictable nature of marine mammal strandings. If you are still unsure of any plans for the next day, please ask other volunteers or the volunteer coordinator at supper.

WEEKEND ACTIVITIES

Weekends are your own leisure time and any activities that you take on will be at your own expense (and risk). There is a file in the ORCA house lounge which contains brochures of some amazing outdoor activities available in the Plettenberg Bay region.

Please do not make bookings for any weekend activities on your own accord. Contact the Programme Manager, Jared Harding, by no later than Wednesday of that week to make the necessary bookings on your behalf, except for transport.



Please see <https://www.plett-tourism.co.za/about/maps/> for more information about activities in the area! 😊

IMPORTANT CONTACT INFORMATION

Contact Numbers

Programme Manager (Jared):	081 377 9478
Ocean Blue Adventures	044 533 5083
Volunteer Coordinator (Laura):	067 082 1898
House Mother and Cook (Tilly):	078 315 2177
Researcher (Chantel):	067 086 4813
Research Assistant (Mel):	082 336 2979



We know you'll have a **fin-tastic** time with the Orca Foundation!

