



SOUTH AFRICAN  
SHARK CONSERVANCY

PROGRAM GUIDE  
2018



THE SHARK ACADEMY

# INTRODUCTION

On behalf of the South African Shark Conservancy (SASC) team, I extend a warm welcome to you - our prospective Shark Academy intern or volunteer. SASC is an NGO dedicated to promoting the conservation and sustainable use of living marine resources through **research, education** and **outreach**.

We are a small, but extremely passionate, group of scientists, field specialists, interns and volunteers - all working toward a common goal: achieving pragmatic and realistic conservation and management measures for sharks both in South Africa and around the World. Using funding from our Shark Academy, research grants, sponsorships and donations, we work to

ensure sharks have a continued place in our oceans. Interns or volunteers who choose to join our team do so knowing that they make a positive and long lasting contribution to our research. In return we will provide you with an unforgettable research experience that will carry you forward in your career. Whether you're an early career scientist or are just passionate about shark conservation, your experience with the Shark Academy will be one you never forget.

We look forward to receiving your application and hope to see you soon!

Warm regards,  
Meaghen E. McCord



## NEW: SCIENCE DIVER OPTIONS

2018



Meaghen McCord is the Founding Director of SASC. She has been named one of Africa's Water Warriors by Forbes Women Africa. The work of her team has been featured on BBC Earth, Animal Planet & National Geographic.

## CONTENT

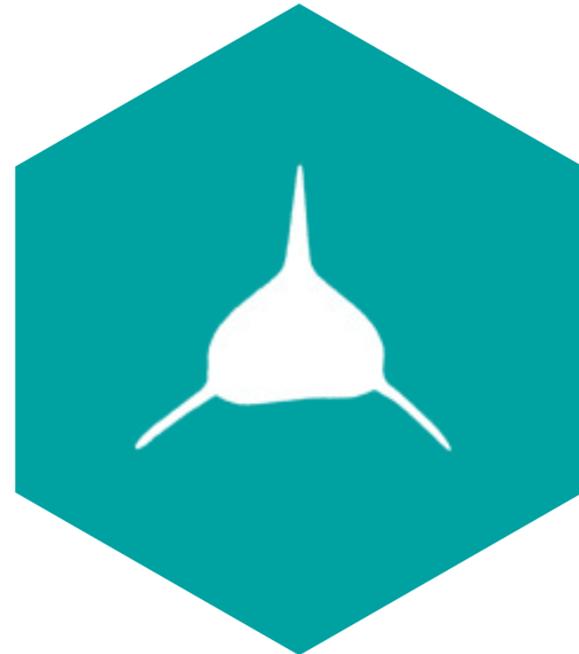
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WE WANT YOU

DIVER MARINE  
BIOLOGIST  
VOLUNTEER  
BACKPACKER  
OCEANLOVER  
CONSERVATIONIST  
STUDENT  
SHARKFAN  
OPTIMIST  
FREESPIRIT  
GAPYEAR



SKILL DEVELOPMENT  
& EDUCATION

JOIN

## THE SHARK ACADEMY

The South African Shark Conservancy has been training early career scientists, conservationists, ocean and shark lovers for more than 10 years. The Shark Academy is the formal skills development and training division for anyone interested in shark science, research diving, science communication, aquarium husbandry, and so much more. We focus on providing you with unparalleled insight into the world of shark science and conservation through incredible field and lab experiences.

### YOU ARE PART OF OUR TEAM

Join the Shark Academy, take an active role in our daily research activities and discover what life is like as a shark scientist. Dedicated and ongoing training throughout your program ensures you build the knowledge, skills and tools required pursue a career in shark science and ocean conservation.

### WHO CAN APPLY?

- anyone over 18 years old
- anyone with a passion for sharks
- anyone with advanced English comprehension
- anyone with a minimum of 2 weeks to spend with our team

### FUN FACTS

SASC WAS  
ESTABLISHED  
IN 2010

OVER 3000  
SHARKS  
TAGGED

>75 EARLY  
CAREER  
SCIENTISTS  
TRAINED

# 02 OUR WORK

## SHARKS IN ECOSYSTEMS

Since 2007 we have tagged more than 3000 sharks representing 27 species. We are now focusing our research efforts on the Cape Whale Coast Hope Spot, where we are conducting an ecosystem level study on the 62 species of sharks, skates, stingrays and chimaera found in Walker Bay.

OUR RESEARCH IS FOCUSED ON  
**ABUNDANCE**  
**DISTRIBUTION**  
**SITE FIDELITY**  
**PREDATION RISK**  
**BEHAVIOUR**



## CETACEANS

Research techniques include:

- baited remote underwater video (BRUV)
- acoustic telemetry
- conventional tagging
- drone surveys
- fisheries assessments
- conservation genetics
- trophic ecology
- diversity surveys

In 2012, SASC and Southern Right Charters partnered to develop a dedicated research project focused on the cetaceans (whales and dolphins) of Walker Bay. Using platform of opportunity monitoring we study:

1. if the seasonal aggregation of southern right whales impacts great white shark occurrence;
2. how predation risk impacts the behaviour of cetaceans;
3. site fidelity, habitat use, behaviour and population dynamics of cetaceans.



Ecological monitoring is key to understanding ecological functioning and change. In 2014, SASC began a long-term monitoring program in two major estuaries flowing to Walker Bay.



S H A R K  
T A G G I N G  
E C O L O G I C A L  
M O N I T O R I N G  
B I O L O G I C A L  
S T U D I E S  
M O R P H O M E T R I C S  
S H A R K  
H U S B A N D R Y

### GREAT WHITE SHARKS

Great white sharks are just one of several iconic predators found in Walker Bay, but they might just exhibit the most control over the moving ecology of smaller sharks and cetaceans. To better understand this we have developed a non-invasive and opportunistic study on white sharks to further our research on the ecosystem dynamics of Walker Bay.

Techniques employed include:

boat-based  
transect  
surveys

drone  
surveys

baited remote  
underwater  
video

active and  
passive  
acoustic  
tracking

behavioural  
monitoring

### THE SHARK LAB

Research in the Shark Lab varies according to Post-Graduate student needs and projects run by our scientific staff. Depending on the time of year, number of students and/or other project requirements, we provide Shark Academy Interns and Volunteers with the opportunity to participate in cutting edge experimental studies on sharks.

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# YOUR OPTIONS

Pick the right package! While the 2-week volunteering package (which is extendable) is best-suited for those who would like to get a sneak peak into the life of a marine scientist and spend some time with sharks, the 8-week internship is designed for those who already lean towards such a career. It provides deeper insights and responsibilities, is slightly more technical and is designed as a perfect program for your practical university placement.



## VOLUNTEER



2 WEEK PROGRAM  
NO SCIENCE  
BACKGROUND  
NEEDED

## INTERN



8 WEEK PROGRAM  
SCIENCE  
BACKGROUND  
RECOMMENDED

TIP: EXTEND YOUR STAY TO 8 WEEKS AND TRANSITION FROM VOLUNTEER TO INTERN

NEW



# SCIENCE DIVER PACKAGES

FIND OUT ABOUT OUR OPTIONAL DIVER DEVELOPMENT PROGRAM FOR SHARK ENTHUSIASTS

Want to pursue a career in marine biology or shark science? Chances are you'll be required to get into the water at some point. Being a certified diver has become a critical skill, even a requirement at some Universities. SASC and the Shark Academy are now offering professional dive training that empowers you to not only be confident underwater – but to also learn relevant research techniques pertaining to the field of ecological monitoring and shark science.

LEARN HOW TO DIVE

DEVELOP YOUR DIVE SKILLS

LEARN DIVE RESEARCH TECHNIQUES

DISCOVER SHARKS WITH SCUBA

- From zero to hero – become a science diver, no matter your certification level.
- We're associated with PADI – the most recognised dive certification worldwide.
- Follow our unique shark diving curriculum, developed for Southern Africa but applicable to anywhere in the world.
- Seamlessly blend the science diver packages into your Shark Academy program.
- Start with the dive theory training from home and save valuable time.

# OVERVIEW

Our optional science diver program is designed so that you can fit it into your regular volunteering and internship activities with the Shark Academy. As you can imagine, the more time you spend with us, the more time you will have to spend underwater.

## VOLUNTEERS & INTERNS BASIC PROGRAM

OPEN WATER DIVER

ADVANCED OPEN WATER

PADI DIVE TRAINING

RESCUE DIVER

DEEP & BOUYANCY SPECIALTY

KELP

SHARK ID

SHARK BEHAVIOUR

MONITORING

SCIENCE DIVER SKILLS

SEAL DIVES

DIVE TRIPS

SEVENGILL SHARK DIVES

BLUE & MAKO DIVES

INQUIRE A QUOTE ONLINE!

# POST-GRAD INTERNSHIP

If you're a post-grad marine biologist looking for great research facilities, strong mentorship and excellent scientific infrastructure for your MSc or PhD, why not consider joining the South African Shark Conservancy? Our team is happy to support you with your research and provide the resources required to drive your work forward.

TALK TO US ABOUT YOUR RESEARCH TODAY!

FLEXIBLE DURATION  
FULL ACCESS TO RESEARCH LAB  
DEDICATED MENTOR  
PRIME LOCATION



# SHARK BOOTCAMP

Are you an educator and interested in teaching your students about conservation, environmental issues and sharks? The Shark Academy has just the thing for you! Join us for a few days of experiential education and discover sharks first hand - at the lab and in the field: exclusive eco-tours, informative lectures and a playful approach to marine science.

3-4 DAYS  
FUN & INFORMATIVE  
Exciting field trips



# 04 EXPERIENCE

As a small team, we work hard to ensure you get the most out of your experience at the Shark Academy.

You will spend days at sea, assist with shark tagging, deploy baited remote underwater video (BRUV) systems, help with ecological surveys, run focal surveys on Great White Sharks, conduct cetacean behavioural monitoring,

contribute to database management & data analysis, and so much more.

Have a look at the different activities you will take part in. These are embedded in a flexible weekly schedule, which is very much weather-dependent and subject to changes. Find a more detailed description on the following pages.

As a Shark Academy intern or volunteer you will be expected to work long days in the field and in the Shark Lab. You will gain hands-on experience tagging sharks, collecting biological data and working on research vessels. You will also work with our team to dispel myths about sharks by helping us run our education and outreach programs.



## ACTIVITIES

### TRAINING FUNDAMENTALS

- Oceans & Coasts in SA
- Sharks of Southern Africa
- Shark Evolution & Ecology
- Sharks & Fisheries
- Shark Population Dynamics
- Science Communication Workshop
- Trophic Ecology & Sharks

### FIELD ACTIVITIES

- Shark diversity surveys
- Snorkelling with sharks
- Shark tagging
- Behavioural monitoring
- Sharks after dark
- BRUV surveys
- Boat safety & safety at sea

### LAB ACTIVITIES

- Shark handling
- Shark husbandry
- Shark dissections
- Shark blood sampling
- Data Management

## A TYPICAL DAY IN THE FIELD

Lesson 1: there is no such thing as a typical day in the field. Weather is unpredictable and so are the sea conditions. One of the most valuable skills you will learn as a member of the Shark Academy is to be adaptable. If we can't get to sea, there is plenty to keep you busy in the Shark Lab. You will help maintain research equipment, enter data, run experiments, write your own research reports, and so much more.

And if you are in the field? It's early to rise as you will come in to the Shark Lab to pack field gear and head to the harbour for launch time.

We typically spend 7 hours at sea, deploying BRUV systems, fishing for sharks, running transect surveys, following whales and dolphins and generally having an amazing time. Then it's back to the lab, where we unpack, clean gear, prepare for the next day and have a good night's rest.



# THE SHARK ACADEMY: 4-WEEK TRAINING PROGRAM



A typical 4-week schedule is outlined, below. Bear in mind that we cannot control the weather and occasionally unforeseen circumstances arise which interfere with our perfectly scheduled plan. Adaptability and flexibility while working with the ocean is key!

## MODULE 1 (WEEK 1)

### SHARKS & OCEANS ORIENTATION

1. Shark Lab Welcome
2. Shark Lab Orientation
3. Oceans & Coasts: Southern Africa
4. Shark Evolution & Ecology
5. Sharks & Fisheries
6. Introduction to Shark Husbandry
7. Shark Sampling & Tagging Techniques
8. Open Water Swim Test
9. Shark Handling
10. Assign Individual Research Project

### FIELD TECHNIQUES IN SHARK SCIENCE

1. Diving with Sharks
2. Methods in Remote Shark Surveys
3. Shark Population Dynamics
4. Shark Tagging
5. Boat-based Shark Diversity Surveys
6. Science Communication Workshop
7. Individual Research Project

## MODULE 2 (WEEK 2)

## MODULE 3 (WEEK 3)

### SHARKS & OCEANS ORIENTATION CONT'D

1. Field Methods in Ecological Monitoring & Habitat Connectivity
2. Telemetry
3. Underwater Shark Census
4. Shark Anatomy & Taxonomy (Dissection)
5. Individual Research Project

### SHARK MANAGEMENT & CONSERVATION

1. Sharks After Dark: night survey
2. Trophic Ecology & Sharks
3. Shark Fisheries Management
4. Methods in Shark Conservation
5. Individual Research Project Presentation

## MODULE 4 (WEEK 4)



Additionally, our free lab tours, educational field trips and Shark Bootcamp events may coincide with your stay and you will be required to participate in our dedicated outreach activities.

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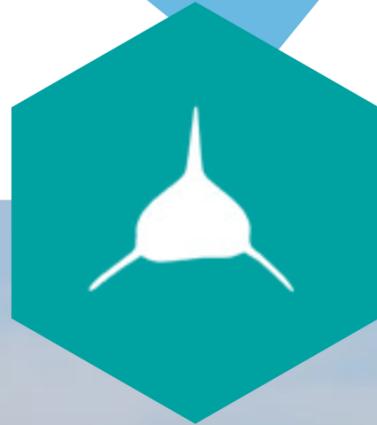
# WHY CHOOSE US

Get your hands dirty: training at the Shark Academy emphasises a combination of hands-on lab and field work. You will quickly become an integral member of our team, helping our researchers handle and tag sharks by the end of your first week at the Academy.

Not sure if you want to become a marine scientist? No worries! Your time with us will help you decide if this is the career for you. And if you merely want to experience a great adventure, our 2-week program is for you!

Your time at the Shark Academy concludes with an official certification document for your CV.

We're dedicated and passionate about marine conservation and training early career scientists. We can't wait to share our knowledge with you! Still unsure? Let us help you make an easy decision by highlighting five key reasons to join the Shark Academy.



The SASC Shark Lab is centrally located in the coastal town of Hermanus. Situated just meters from the sea, the Shark Lab is the central hub for our research and education projects. It is a fully functional wet lab, enabling us to run ongoing experiments on shark behaviour and biology. Additionally, it serves as a central hub for our outreach projects with local schools and communities.



## THE CAPE WHALE COAST

Our research is conducted in the Cape Whale Coast Hope Spot - a 200 km stretch of coastline situated on the southwest coast of South Africa. In 2014, SASC worked with renown oceanographer and conservationist, Dr. Sylvia Earle, to declare this a critical marine biodiversity hotspot. This echoes our sentiments that this region - which hosts more than 60 species of sharks, skates and stingrays - is ideal for our decade-long research on these threatened animals.

### COOL FACT

Our research area lies at the confluence of two diverse large marine ecosystems: the Benguela LME and the Agulhas-Somali LME.

#### 1. EXPERIENCE

Your time with us is packed with education and adventure. The Shark Academy will impact you for the rest of your life.

#### 2. DEVELOPMENT

We're committed to giving you the skills & tools you will need to start a career in marine science, from lab work to field work.

#### 3. LOCATION

With over 60 different shark species, our Shark Lab is in the heart of some of the sharkiest waters in the world.

#### 4. MENTORSHIP

Throughout and beyond your stay with the Shark Academy you will be given professional guidance and a mentorship.

#### 5. NETWORK

Finding a job in marine science can be difficult. Use our extensive global network to your advantage.

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## FAQ

### AM I ELIGIBLE?

If you love sharks and the ocean, you are eligible. The only restriction is that you must be 18 years or older to apply and have good English skills, so you can understand all our briefings and scientific presentations.

### HOW DO I APPLY?

We have set up an easy step-by-step application process online: **check out** the program, get a **quote** for your preferred stay, **send** us your **application**, **pay** a **deposit** to secure your stay and make sure you **tick** the boxes of your **checklist**. Then prepare to embark on this great journey.

### WHAT IS THE COST?

Peak season (April-August) and off-season (September-March) rates are as follows:  
Peak season (<8 weeks): USD650/week  
Peak season (>8 weeks): USD600/week  
Off-season (<8 weeks): USD575/week  
Off-season (>8 weeks): USD525/week

### WHAT DOES THE COST INCLUDE?

- Shark Academy orientation & training
- Wifi at the accommodation & Shark Lab
- Accommodation
- Bi-weekly accommodation cleaning
- Shark Academy welcome pack
- Weekly transport to the shops
- Return transport from Cape Town Airport
- Assistance arranging your own tours
- Daily breakfasts
- Work related activities & research travel
- A Shark Academy fun & educational excursion

### WHAT DOES THE COST EXCLUDE?

- Flights
- Visas (if required)
- Medical/travel insurance
- Laundry
- Lunches & dinners
- Non-work related travel (we can arrange for you)
- Social activities
- Spending money

### DO I NEED A VISA?

That depends. Please check with your South African embassy before traveling.

### ARE VACCINATIONS REQUIRED?

No.

### WHERE WILL I STAY?

You will stay at the Shark Conservancy House situated in Onrus - a seaside suburb of Hermanus. Please note that accommodation is shared.

### WHAT SHOULD I BRING?

You will get a full list of things to bring and to take care of, as soon as you are accepted into the Shark Academy.

### HOW WILL I GET AROUND?

Work-related transport is provided. For social activities and travel, we recommend you rent a car. Alternatively, you can use the local and reliable taxi services.

### ARE THERE RULES I SHOULD KNOW ABOUT?

SASC and the Shark Academy have a zero tolerance policy. If interns or volunteers are thought to be under the influence of drugs or alcohol, they will be expelled from the program immediately without refund. We also have some simple house rules of course, to make sure everyone has a great stay at the Shark Conservancy House.

### HOW DO I GET TO HERMANUS?

We will arrange the transport. Participants **must** arrive on the Sunday before the start of the volunteering/internship period. Transfers are scheduled for 4PM, so ensure you arrive at least 2 hours prior to transfer time, to allow for customs clearance. If you can't make the scheduled transfer time, contact the Shark Academy Administrator, Mariana Smal, to make alternative transfer arrangements. Please note that transfers outside the scheduled time will be at your own cost. These vary depending on the time of day and number of passengers. However, it should not exceed R800 (one way).

### WHAT WILL I TAKE AWAY FROM THIS EXPERIENCE?

Incredible experiences. Valuable research skills. Confidence. A profound understanding of ecological research techniques and South African ecosystems. Friendships. Life-long memories. And much more!

### WHO SHOULD I CONTACT?

You can send us a message any time. Mariana Smal (mariana@sharkconservancy.org) is responsible for Administration & Coordination of the Shark Academy program. She is happy to answer all your questions.

### FOR MORE INFORMATION

Check out [www.sharkvolunteer.com](http://www.sharkvolunteer.com) and [www.sharkconservancy.org](http://www.sharkconservancy.org) for more information about the Shark Academy program and SASC.