

SHARK RESEARCH AND CONSERVATION EXPEDITION

**Archipeligo Revillagigedo
(Socorro Islands) Mexico**



**with Fins Attached
and
AquaSub Scuba Diving Centre**

March 17th - 28th, 2019

Aquasub Scuba Diving Centre is teaming up with **Fins Attached Marine Research and Conservation** group to offer our customers the opportunity to participate in hands on shark conservation and research during the dive trip of a life in the Archipelago Revillagigedo off the south west tip of Mexico's Baja Peninsula.

This liveaboard expedition is a total of 10 days on the water plus a day on each end for travel and includes 8 days of some of the most incredible diving available on the planet for a total of 12 days for the trip.

This is a specially packaged expedition that includes not only the three closer islands in the chain, but also the fourth and most remote Clarion Island and thus the trip is extended from the typical 6 days of diving to 8 days of diving.

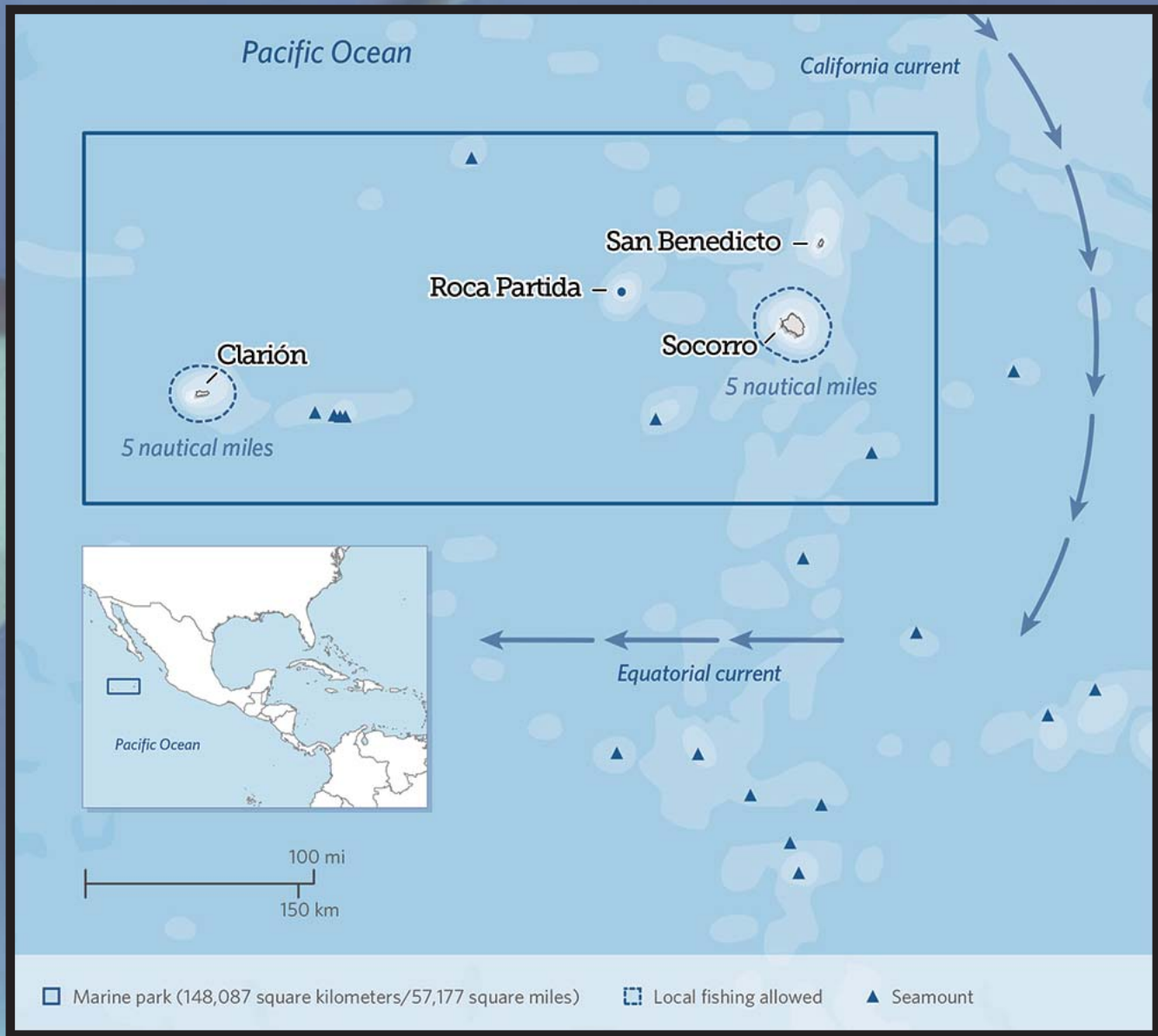
During this trip you will not only be diving, but you will be working – hands on – with the various shark species that reside in this remote locale. Shark species that include: Scalloped Hammerheads, Tiger, Galapagos, Silky, Silver Tip Reef, White Tip Reef, Black Tip Reef and more ... by the thousands.

You will be assisting in the careful capture, tagging with radio or satellite trackers, collecting data and releasing of the sharks. You will be assisting with the collection and replacing of the radio tracking stations at depth. During the dives you may find yourself distracted by a persistent succession of Giant Pacific Manta Rays that constantly seems to be circling above you. You may also be distracted by families of dolphins that come to investigate the divers from time to time.

The island chains are marine protected areas where fishing is prohibited so you will see large schools of tuna and snapper. Depending on the water temperatures you may see humpback whales or whale sharks at the sites as well.



The Revillagigedo Islands are a group of four volcanic islands in the Pacific Ocean, known for their unique ecosystem. They lie approximately 390 kilometres (240 mi) southwest of Cabo San Lucas, the southern tip of the Baja California Peninsula, and 720 to 970 kilometres (450 to 600 mi) west of Manzanillo.



Conditions:

Depth: 33 - 100ft (10 - 30m)

Visibility: 50 - 115ft (15 - 35m)

Currents: Moderate but can be strong

Surface conditions: Can be choppy

Water temperature: 70 - 79°F (21 - 26°C)

Experience level: Intermediate - advanced

Distance: 280 miles (450 km) west from Cabo San Lucas, Baja California

Recommended length of stay: 8 - 9 days

There are often quite sheltered mooring spots around the islands but the seas can be choppy during crossings.

San Benedicto - This is the third largest in the Revillagigedos group and is often the first place to be visited on liveboard diving trips to the Socorro area. San Benedicto is known throughout the world for the quality of manta ray encounters which divers experience here. This is not just a quick glance at a passing manta ray or two but a series of prolonged and intimate interactions with several giant Pacific manta rays. These majestic creatures come to this area to be cleaned by Clarion angelfish.

Mantas take center stage alongside a glittering support cast including: schools of hammerhead sharks, dusky sharks, silky sharks and dolphins. The most highly rated dive site at San Benedicto can be located at the surface by sighting the swell and surf that looks like the sea is boiling. When you see this you know you have arrived at The Boiler.



The Boiler features a beautiful pinnacle which rises from a base of around 165ft (50m) to within 20ft (6 or 7m) from the ocean surface. Most of the beauty at this site is within 100ft (30m) depth so there is no need to dive very deep. Certainly you do not need to go too deep to experience some unforgettable encounters with giant Pacific manta rays.



Since this is a cleaning station where Clarion angelfish nibble parasites of the grateful mantas' bodies, you can see many of them gathered here. They seem to almost welcome the presence of scuba divers, and might swim very close to come eyeball to eyeball with you. They also clearly revel in the sensation of divers' bubbles rippling up against their bodies. If they came for the equivalent of a spa scrub from the Clarion angelfish then you are providing a gentle bubble massage.

Other marine creatures are also drawn to this cleaning station. You might also see tiger sharks and whale sharks and maybe even humpback whales, if you are particularly lucky. Even if you don't see one, the whale song can provide an auditory backdrop to your whole dive at The Boiler.

Located on the south side of San Benedicto is The Canyon, which is likely to provide you with more unforgettable experiences with marine mega-fauna. Mantas are often seen here too although the encounters tend not to be as awesome as at The Boiler, although they can still be pretty awesome.

Sharks are more the order of the day at The Canyon with healthy numbers of silky sharks, Galapagos sharks and hammerhead sharks being the most frequently sighted. While the silkies and Galapagos sharks may travel solo or in small groups, the hammerheads can be present in vast schools. There are also swirling clouds of reef fish cascading up and down the slope, and always a chance of a passing pod of dolphins, making it a great site for photography.

This dive site is less subject to challenging conditions than The Boiler and is often dived when it is decided that there is too much boiling going on.



Socorro Island - Indicated on the surface by a thin finger of rock stretching out from the east coast of the island, Cabo Pearce is a reef that extends out into the prevailing current.

There is often a lot of dolphin activity here and a pod may greet your liveaboard dive tender and entertain you before you even hit the water. Few places in the world offer experiences with dolphins like here, which are far from fleeting. Here they may hang around to see you entering the water and dropping down and could stay in the area for your whole dive, their playful clicks and squeaks dancing through your ears, when they are not directly in sight.

One way to dive this Socorro site is to descend and nestle among the rocks, protected from the strongest of the current. Here you await the majestic sight of a huge school of scalloped hammerheads, weaving their way into view. Silky sharks are also not uncommon here, particularly later in the day. You have a strong chance to be entertained by several playful manta rays at Cabo Pearce, and if you are in the right time and right place a humpback whale might even ease its mighty bulk into your field of vision.

There is a plateau at 33 to 39ft (10 to 12m) where you can spot smaller creatures including lobsters and various little schools of reef fish.

The plateau gives way to an interesting cavern which is one of Socorro's few photogenic topographical features. There is a good chance of encounters with other species such as Galapagos sharks, gray reef sharks and silky sharks.

Located on the west coast of Socorro Island is Punta Tosca, another site where the chance of long and intimate encounters with dolphins is strong. Tiger sharks, although not the most common species in this water, are regularly seen and Punta Tosca is one of the best places for them.

Other sharks often spotted here include Galapagos sharks, silky sharks and silvertips, as well as turtles and lobsters. This is one Socorro dive site where anything can happen, and when something does it is usually unforgettable.



Roca Partida - meaning 'split rock', is a small pinnacle that rockets up from the sea floor from below 164ft (50m) depth, approximately 64 miles (40 km) from Socorro. The 2 points of the split pinnacle rise above the surface and have met with the unfortunate fate of being a dumping ground for gulls and boobies that leave deposits all over the rock. To be on a dive tender downwind of this site is a sensory experience not to be forgotten.



The topside scenery and scent, combined with the incredible underwater action, have led many to compare the scuba diving here to Wolf and Darwin islands in the Galapagos. For some, Roca Partida represents the best spot in the Revillagigedo Islands and is an essential part of the Socorro diving experience. It is a magnet for pelagics like wahoo, marlin, Giant Pacific manta rays, tuna and mackerel. Whitetip reef, scalloped hammerheads, silvertip sharks, Galapagos sharks and whale sharks are among the shark species seen here. Dolphins and humpback whales are also sighted some times.



There are vertical walls dropping down to 130+ft (40+m) and often current is present. However, it does not represent too much of a challenge to the experienced diver. The pinnacle itself is quite small and can be circumnavigated more than once if that is how you choose to dive it. Alternatively you can swim away from the walls to take get closer to the passing pelagic action and improve your chances of seeing the schooling hammerheads.

Few places in the world are quite as prolific for big marine life as Roca Partida and most divers relish the chance to drop in again and again into this incredible site. One dive could see you hanging in the blue or holding to the wall while checking out a school of hammerheads or thousands of yellowfin tuna.

Another dive could see you hugging the walls and swimming around the pinnacle from a deep starting point. This way you can keep an eye out for all the various shark species in the area. You can explore some small caves where whitetip sharks rest and lobsters lurk. In the shallows there are sometimes clouds of creolefish and jacks completely encircling the disorientated, enchanted divers. Being near the surface, you can watch the dramatic scenes overhead as waves and swell crash up against the rocks as you count down your safety stop.

Isla Clarion – About 240 miles west of Socorro lies another body of land, the second largest in the Revillagigedo Islands.

Formerly named Santa Rosa, it was renamed Clarion Island after the American brig “Clarión” in the early 1800s. The Clarion Angelfish is named after Clarion Island but is seen all around Revillagigedos.

As a juvenile it has bright blue bands that fade away as the fish matures. It is generally considered to be an endemic species to the Revillagigedos archipelago. Adults are commonly seen cleaning parasites from the giant manta rays.



Clarion is also home to silvertip and Galapagos shark nurseries and turtle nesting beaches. As such, it is not uncommon to see tiger sharks in the area.

Isla Clarion is little over five miles long and two miles wide.

With three volcanic peaks, rolling landscape and rocky, perpendicular cliffs, it looks much like Socorro Island.

There is a bay called Sulphur Bay on the south side of the island.

ITINERARY AND DIVE SITES

March 17th, 2019

Arrive in Cabo San Lucas, travel by bus or taxi to San Juan Del Cabo to spend the evening.

There will be a group meetup for dinner and drinks for all those interested and arriving in time.

March 18th, 2019

BOARD SHARKWATER AND DEPART SAN JOSE DEL CABO AROUND 12:00PM

Travel to San Benedicto Island takes 24 - 26 hours.

March 19th through 26th - Diving and Research Activities

SAN BENEDICTO ISLAND

Coordinates: 19.309354, -110.809160

- Average depth: 25m
- Maximum depth: 30m

El Fondeadero is often dove first. It is generally pretty calm and not too deep so its where we will do our checkout dive. There are three large pinnacles full of lobster, fish, eels and occasionally shark.

THE BOILER

A large pinnacle rises to about 20 feet (6m) from the surface, so you can't see it from topside. The surf and swell running across the top sometimes making the water look like its boiling. The pinnacle is small enough to swim around during one dive and its very majestic looking from all angles. The bottom is at around 160' (50m) so getting your weights right and not being too heavy is very important. This area is a popular cleaning station for the giant Pacific manta. They gather here to be cleaned by the Clarion Angel-fish.

It is usually just a matter of a few minutes in the water before the mantas started to show up. As they approach, they look you right in the eye, and you feel like you are communicating with them. In March, we may be fortunate enough to see a humpback whale underwater here, and maybe even a tiger shark.

THE CANYON

"El Canyon" is on the south end of the island. It was here that we may see many mantas, dolphins, Galapagos sharks, silky sharks, tiger sharks, and schools of hammerheads off the point.

SOCORRO ISLAND

Coordinates: 18.8166634,-112.76666360000002

- Average depth: 25m
- Maximum depth: 40m

CABO PEARCE

Cabo Pearce is located on the east side of Socorro Island. You can expect to see dolphins, humpback whales and mantas.

PUNTA TOSCA

Punta Tosca is another site on Socorro Island. There are often playful, sociable dolphins here, and sometimes Silky sharks.

THE AQUARIUM

Usually in the afternoon dives, will be on the other side of the island at a spot called "The Aquarium". We may see whales just offshore while at this site.

ROCA PARTIDA

Coordinates: 19.010361, -112.066033

- Average depth: 20m
- Maximum depth: 40m

Roca Partida is a pinnacle about 85 miles from San Benedicto Island. About 100' high and as long as 300 feet, the pinnacle is in the middle of nowhere and is a magnet to pelagics. This is where you can see many sharks, mantas, huge schools of fish, and whale sharks. Schools of hammerheads and silky sharks have been seen here, and many whitetip reef sharks resting on the ledges of the pinnacle. Humpback whale also hang out around Roca.

ISLA CLARION

Coordinates: 19.3093540, -110.8091600

Clarion Island is home to nurseries for several species of sharks and turtles and is also a good location for spotting Tiger Sharks.

March 26th, 2019

After diving, we will begin our return trip San Juan Del Cabo - a trip that will take 24 to 26 hours.

March 27th, 2019

We will arrive in San Juan Del Cabo in the late afternoon / early evening and you will need to spend the night in a hotel.

An evening out on the town will be planned for everyone interested in working off their sea legs.

March 28th, 2019

Everyone can make their way to the airport and catch their return flights and once home, tell everyone about the incredible trip you just had ...

The above is subject to change depending on the conditions, research, and group desires.

About Fins Attached - finsattached.org

Our Mission

To conduct research, promote conservation, and provide education for the protection of the marine ecosystem.

We believe in the preservation of our world's precious resources and that through the protection of the oceans apex predators, marine ecosystem balance can be maintained for the benefit of all living things on earth.



The health of any ecosystem is controlled largely by its apex predators. So, while our work aims to impact the marine ecosystem as a whole, much of our research is focused on the apex predators of the marine environment, which are sharks.

Our organization is comprised of scientists, companies, organizations, and people concerned with the health of the world's oceans. The scientists that represent Fins Attached range in backgrounds from divers to Ph.D marine biologists.

As a result, we direct our efforts in the following categories:

- Shark Research
- Shark Conservation
- Public awareness and education
- Advocacy – Affecting international policy to protect our oceans

Our Approach

Fins Attached believes in a multi-pronged approach to protecting sharks and our oceans. The data obtained from the research is what drives the conservation message. The combination of the research and conservation is what dictates the education narrative. Ultimately, if anything is to happen to protect sharks, then international policy must be changes to conserve sharks.

Research

Research on sharks has been slow and inconsistent. There are two main reasons; one is the remoteness and inherent dangers and difficulties of studying sharks in their natural habitat, and two, the lack of funding.

However, we are beginning to understand sharks and their behavior, where sharks go and why they go there. For example, satellite tagging of whale sharks has demonstrated that this species can be highly migratory traveling across ocean basins. Knowing that a species is highly migratory means it more susceptible to fisheries in areas where it is not protected. Acoustic tags have also been used to study sharks in a particular area to determine their residency status. Acoustic tags are attached to the sharks and receivers are placed on the sea floor so that when a shark with an acoustic tag gets close the receiver stores the data transmitted by the tag.



Both satellite and acoustic tags can be equipped to record depth, temperature and location information. This kind of science requires a tremendous amount of money, and this money is usually not available unless the end results could lead to useful applications and profits. Research into sharks for their own sake is more difficult to fund. However, this is essential for their survival. The scientific data is needed to back-up any conservation argument.



It is important to not only understand shark migratory patterns, but to also identify nursery areas where sharks go to give birth. Marine protected areas (MPAs) must be established to protect these nursery areas so that the young sharks have a chance of surviving to adulthood.



Conservation

Sharks play a vital role in our ecosystem as part of a complex system of checks and balances. As apex predators they are at the top of the food chain. Many sharks prey upon wounded or sick animals, keeping the populations of various species healthy and in balance, while others scavenge the ocean by feeding on dead animals or by filter feeding. Hunting sharks to extinction will have a catastrophic effect on the world's ecosystem. Millions of sharks are killed every year. Many sharks also fall victim to finning, the practice of cutting the shark's fins and then discarding the still-living shark into the sea to die.

With the exception of a few countries that have instituted national measures for their shark fisheries or protection for individual species, there are virtually no controls on shark fisheries around the world. There is an urgent need for management and monitoring to be instituted at the national, regional and international levels to prevent the extinction of species and populations.

The problem sharks face is that they are slow growing and give birth to only a handful of pups. Due to this reproductive strategy, sharks cannot keep up with the pressures put upon them from commercial fisheries. They simply cannot reproduce fast enough. Some species of sharks have been reduced by more than 95%.

Conservation of sharks can be considered on one of three levels, or a combination of all three. There is conservation for the sake of the environment and maintaining its balance; then there is conservation for the sake of humanity, to not allow a living creature to become extinct; and finally, there is conservation for economic reason. No matter what level you are on, conservation depends heavily on education. Shark populations are being decimated throughout the world. Some species are already biologically extinct in some oceans and many others are on the verge of becoming extinct.

We must act now! Sharks are exploited for their meat, fins, cartilage, leather, oil, teeth, gill rakers and jaws. They are directly targeted in some commercial and recreational fisheries and are caught incidentally as bycatch in many other fisheries. Fisheries are a major factor affecting shark populations. The continuing emphasis on shark fisheries appears to be the result of several factors, including the increase demand worldwide for fish protein, a related rise in shark exploitation to replace declining catches from many depleted fish stocks. There has also been a rising demand for the value of shark fins in international trade, primarily a result of the rise in the middle class population of Asia.



Education

Sharks are a vital component of marine ecosystems; as apex predators they control their prey populations: stabilizing population fluctuations and removing diseased or genetically flawed individuals. Their disappearance can be extremely damaging. Nevertheless, sharks are being subjected to intense fishing pressure as a result of the high demand for shark fins and cartilage. Since many sharks travel long distances, crossing oceans and national boundaries, they are susceptible to the unregulated fishing efforts of multiple nations. Consequently, shark populations have plummeted worldwide to less than 30 percent of their numbers two decades ago. This decline, coupled with the slow reproductive rate of most sharks has meant that there is now considerable concern about the health of shark populations and an urgent need for effective conservation and management.

There is a well-documented history of shark stocks that have undergone a brief period of fisheries exploitation followed by a sudden collapse in yield. Examples of collapsed shark fisheries include the porbeagle (*Lamna nasus*) fishery in the North Atlantic, the soupfin shark (*Galeorhinus galeus*) fishery of California, various basking shark (*Cetorhinus maximus*) fisheries, and the spiny dogfish (*Squalus acanthias*) fisheries, both in the North Sea and off British Columbia. All unregulated targeted shark fisheries have been boom and bust endeavors. This is marked by a relatively short period of booming business, which is followed by a rapid decline in catches and a long period of either slow recovery, or no recovery at all.

The increase in demand for shark fins in the Asian markets has further increased the exploitation of sharks around the world. Shark fin soup is a delicacy in Asian restaurants where it is reported that a bowl of shark fin soup can cost as much as \$250 per bowl, depending on the amount and type of shark fin used in the soup. Many times the sharks are finned, a practice whereby the fins are removed from the shark, while it is still alive, and the body is thrown back into the sea. The fins are the most valuable part of the shark and thus the fishermen would rather fill their boats with fins rather than the less valuable shark meat.

How Can You Help?

There are several ways to support Fins Attached. Please feel free to select all of the below or perhaps one that works best for you. An online tax-deductible donation is a great way to directly support our research and conservation efforts. You may do this by going to the Donate page.

BE A MINDFUL CONSUMER

Only eat seafood that doesn't have a track record of killing or injuring sharks as bycatch. Longlining is one fishing method that is very harmful to shark populations. Tuna and swordfish are two types of fish that are caught by this method.

Be a patron of businesses that are mindful about the plight of sharks and in particular do not do business with restaurants that serve shark fin soup or that sell shark products (such as shark cartilage as a health supplement). These businesses are more common than you think and you may be supporting them today. In a polite way, let the manager / owner of the business know why you will not do business with them. You may be the first person to have this conversation with them and it could make the difference in whether they continue to offer sharks products or not.

HAVE CONVERSATIONS WITH PEOPLE YOU KNOW

People love to talk about sharks and they are generally unaware about the realities shark populations face. They are just missing the knowledge about what actions everyday people can take in their lives to make a difference. Please share your passion and what you know and then refer them to finsattached.org for more.

Diving with AquaSub Scuba Diving Centre and Fins Attached Research and Conservation:

Diving on this trip will be made using NITROX - if you do not have your Enriched Air Nitrox certification, we can arrange for this training prior to the trip.

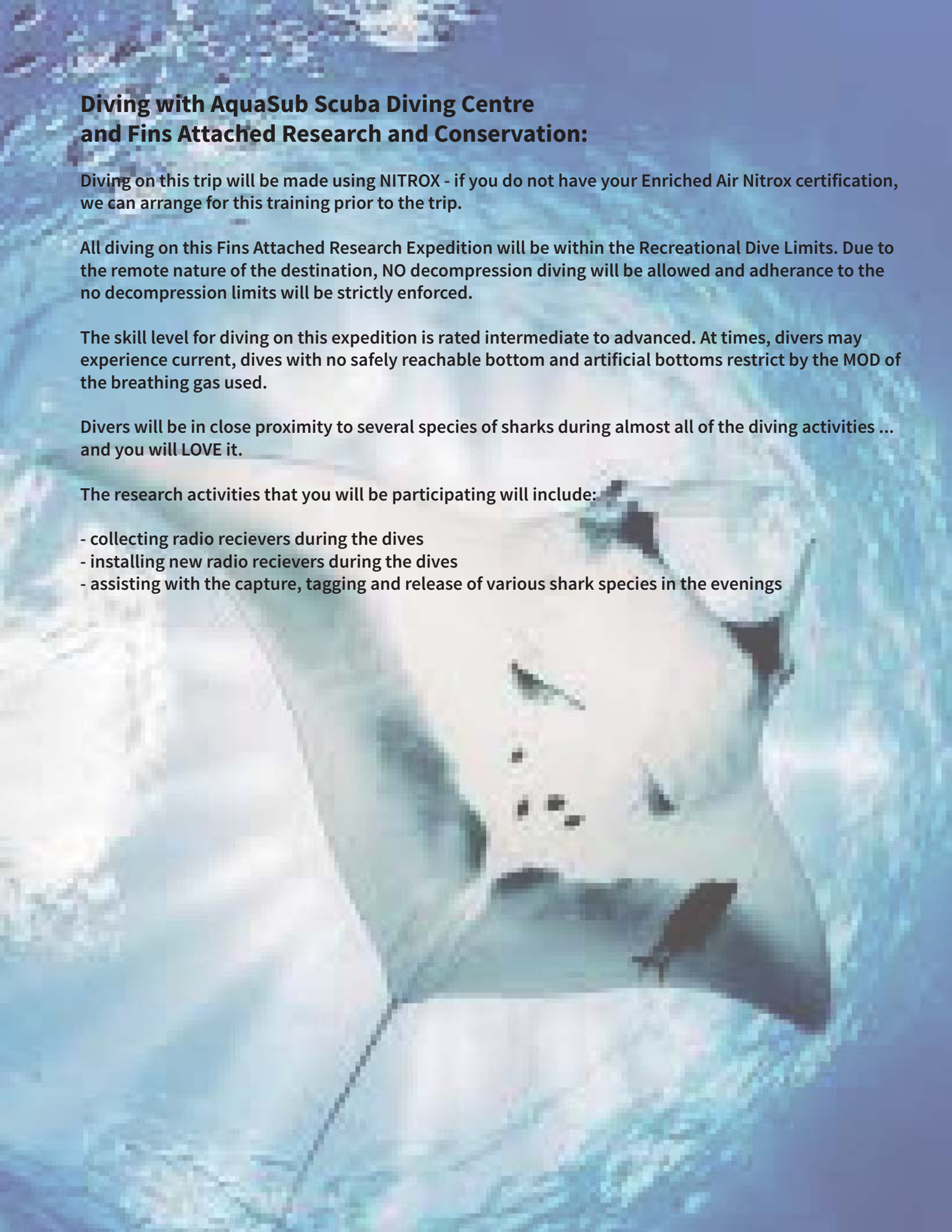
All diving on this Fins Attached Research Expedition will be within the Recreational Dive Limits. Due to the remote nature of the destination, NO decompression diving will be allowed and adherence to the no decompression limits will be strictly enforced.

The skill level for diving on this expedition is rated intermediate to advanced. At times, divers may experience current, dives with no safely reachable bottom and artificial bottoms restrict by the MOD of the breathing gas used.

Divers will be in close proximity to several species of sharks during almost all of the diving activities ... and you will LOVE it.

The research activities that you will be participating will include:

- collecting radio receivers during the dives
- installing new radio receivers during the dives
- assisting with the capture, tagging and release of various shark species in the evenings



Travel Booking Form – Shark Research Socorro – March 17 – 28 2019

Complete and fax to AquaSub 905-737-3483 or email to info@aquasubscuba.com

PASSENGER INFORMATION – MUST MATCH PASSPORT

MR/MRS/ MS	FIRST NAME	MIDDLE NAME	LAST NAME	DATE OF BIRTH DD/MM/YY	CITIZENSHIP

ALL PASSENGERS MUST HAVE A PASSPORT VALID FOR 6 MONTHS AFTER TRAVEL DATE.

CITIZEN SCIENTIST RESEARCH DIVING PACKAGES* ALL INCLUDE:

10 days at sea on the liveboard M/Y Sharkwater, meals, drinks, snacks, nitrox and research activities

*Package Selection is based on availability at time of booking

- PACKAGE A: USD \$4650** (per person) Triple Occupancy Room – three single beds
- PACKAGE B: USD \$4850** (per person) Double Occupancy Room – one double, one single
- PACKAGE C: USD \$5250** (per person) Owners Suite – Double Occupancy Only - queen or two singles

A \$1000 USD Deposit per traveller will be charged immediately to reserve your spot(s). The balance of the package price will be charged on January 02, 2019.

NOT INCLUDED:

Airfare to and from Cabo San Lucas (starting at \$500 CDN)

Airport Transfers

Two nights accommodation in Cabo (approx. \$110 USD per night)

Port and Park Fees of \$80 USD

Fuel Surcharge*

* Due to the possible increase in the cost of oil, based on historical events in the past few years, Fins Attached reserves the right to charge a USD \$200 Fuel Surcharge. This fee will be effective in the event that the diesel fuel price published by Mexico increases.

PAYMENT INFORMATION

Card Holder Name: _____

Card Number: _____ Expiry: ____/____

CSV: _____

Authorized signature: _____ Date: _____

Address: _____ City: _____

Postal Code: _____ Phone: _____ email: _____

TRAVEL INSURANCE: We strongly recommend that you purchase medical, dive accident, trip cancellation and interruption insurance. Would you like us to provide you with a quote for insurance? YES NO

Diver Detailed Information Form (complete one per diver)

Name: _____

Address: _____

City, Province, Country, Post Code: _____

Email: _____

Passport Number, Country and Expiration Date _____

Diver Certification Level and Number: _____

Diver Nitrox Certification Number: _____ Date of Last Dive: _____

DAN Insurance Number and Expiration _____

Emergency Contact Name _____ Relationship: _____

Emergency Contact Phone Number _____

Do you have any illnesses? If Yes, please explain: _____

Are you taking any medications? If yes, please list: _____

Do you have any food allergy or dietary requirements? If yes, please explain: _____

Is there anything else you think we need to know about you? _____

Please feel free to attach an additional page.

All bookings are made through AquaSub Travel
Tel. 905-883-3483 1241 Elgin Mills Rd E Unit 2, Richmond Hill ON L4S 0B5 TICO 50018183

Additional Trip Information:

AIRFARE: AquaSub Scuba Diving Centre is TICO registered travel agency (#50018183) and can arrange for your return airfare to Cabo Sab Lucas, MX if you like.

Would you like us to arrange your airfare? YES NO

ACCOMODATION: You will require accomodation in a hotel for the night of March 17th (arrival) and March 27th (night before departure).

Would you like AquaSub to arrange for accommodation in San Jose Del Cabo, Mx for you? YES NO

If you have any questions please feel free to contact
tyler@aquasubscuba.com or call 905-883-3483.

