



A hawksbill turtle cruises in underneath a mass of creole fish.

“Imps of Darkness” GALAPAGOS

“The black Lava rocks on the beach are frequented by large (2–3ft), disgusting clumsy lizards. They are as black as the porous rocks over which they crawl and seek their prey from the Sea. I call them 'imps of darkness'. They assuredly well become the land they inhabit.” - Charles Darwin

: Glen Cowans & Louise Stazonelli

When Charles Darwin visited the Galapagos Islands in 1835 he was so repulsed by the marine iguanas that are unique to the islands, that he wrote the above passage in his journal. If he had asked my opinion, I would hardly have described them as disgusting, more I think them totally captivating. It is incredible that this species has evolved from a land dwelling iguana, where with limited food availability they have descended into the sea to forage to such an extent that the algae found beneath the waves has become its only food source. Fascinating indeed and my endeavour to photograph them underwater one of the driving ambitions of this trip to the Islands.

The Galapagos Islands sit in a fairly unique location in that they are swept by ocean currents from no less than 5 directions, driving different marine ecosystems throughout the archipelago and these temperature driven environments also vary over the course of seasons, which again is varied even further during peak El Nino and La Nina events. This translates that you can expect

completely differing diving from freezing cold to temperately warm in the course of one voyage and that species that survive here have to be very hardy indeed. The northern islands around Wolf and Darwin are considered to be tropical, the southern islands have water temperatures that are considered warm-temperate and the western shores of Isabella in the west region is considered to be much cooler with greater salinity and nutrient upwellings, and finally the central regions are a blend of the three. This results in a very diverse and rich marine environment.

The more tropical Wolf and Darwin in the north are considered to be the epitome of diving, not just as far as Galapagos is concerned but iconic and almost revered as two of the best dive sites in the World. And as for spectacular they do not disappoint. Hammerhead sharks can be seen in incredible numbers, either schooling along the walls or over the sand slope at the end of the reef at Darwin's Arch. Interestingly if they are doing one location in large numbers they usually are not found at the other, it is not really known why. The waters of these northern islands, usually the clearest in the Galapagos, are also thick with incredible numbers of small creole

fish feeding in the water column, through which you can see marbled stingray free swimming, turtles ambling by and if you are really lucky, whalesharks and manta rays, usually around Darwin Island.

One of the most amazing things we witnessed at Wolf was thousands of boobies and frigates over the water hunting from above the surface and schools of bonito from below, feasting on baitfish in the open ocean. We attempted to get in on the action and although they were just under the surface the baitfish were so dispersed that it was impossible to drop in on anything with any success. So deciding to dive the edge of Wolf Island we entered the water into what appeared to be a snow-storm. These baitfish had sought shelter near the island but were so exhausted that they were actually dropping dead and sinking to the bottom right in front of our eyes. This was much to the delight of crabs and marauding moray eels. Shadows loomed from near the shoreline rocks surprising us as they morphed from the haze of distance into silky sharks, normally timid of divers and open ocean dwellers, the falling snow of baitfish had attracted them close to the shoreline.

The Galapagos are also home for two endemic species of pinniped, the Galapagos sealion and the Galapagos fur seal, which can be found throughout the islands and across the different temperature zones. The sealions tend to be more playful and approach divers easily, the fur seals are considered to be the opposite and far more rare to obtain imagery of. So it was with great delight as we dove around the islands that we enjoyed interactions with both of these fin footed acrobats of the sea. The sealions are recognised by their larger size (1.5m – 2m) and smaller eyes, whereas the fur seals are actually quite tiny (1m – 1.5m) but with very large eyes for

nocturnal hunting. Unusually it was the fur seals that displayed the most playful behaviour, as we entered the water they leapt in with glee, zooming down in your face and away again, over and over, but all at warp speed which made capturing the image quite a challenge. You could not track them fast enough and at the same time their antics were so funny that you found yourself just watching them for fun instead of getting the shot. By comparison the sealions we encountered were at first slightly ambivalent of us but would approach much slower and at times even just stop, sit and look at us.

Leaving the north behind the voyage heads west and south towards the west coast of Isabella and more temperate waters, this is the region in which the green algae grows prolific on the rocks beneath the surface and the realm of the marine iguanas. Timing is critical to your chances of seeing the iguanas underwater. I asked the Captain when we would start looking for the iguanas and his response was to look through his binoculars at the shoreline before replying that it would probably be an hour or so. I borrowed the binoculars and looked myself, only to realise that what I thought were black rocks in the sand were actually marine iguanas all laying together as a thorned leathery mass. We had had a cloudy morning and the iguanas were taking longer than usual now that the sun had come out to wake up. Being cold blooded creatures they needed to absorb the heat from the sun and over the next hour and a half, with my patience definitely tested, they gradually began to head towards the sea.

In times of strong El Nino, their foodstock of algae is limited due to water temperature change. This in turn decreases the numbers of iguana, Darwinism in effect ensuring only the strongest survive. Despite our El Nino event a large group swam out into the bay and began descending the shallows. So rolling into the water we began to search for these wondrous lizards of the sea. We had to go quite shallow where the wave action created a surge before eventually finding not just one but dozens of them holding onto the reef with their claws, and turning their heads sideways to rip out a tiny shred of algae. I was amazed at how close I could get, they did not seem to even sense that I was there, or did not care. Perhaps it was because they have few marine predators or maybe they just do not see well underwater. The

Getting there:

Travel and flights can be arranged directly through Aggressor Adventure Travel info@aggressortravel.com. The Galapagos Aggressor leaves from Santa Cruz Island, which has its own airport (Baltra), there is also an airport on San Cristobal, so you need to be aware of this if arranging your own flights.

Taxes and Fees:
US\$100 (cash only) National Park permit, payable when you arrive in Galapagos.
US\$20 (cash only) Galapagos entry fee, see below.

Health & Vaccinations:
Non specifically suggested
Entry & Exit Requirements:
Entry to the Galapagos is via Ecuador, either Quito or Guayaquil. Ecuador does not require a visa for visitors staying less than 90 days. You must have a passport valid for at least 6 months from your date of entry. Your departing flight to the Galapagos will require you to do two things before lining up to check in. Firstly pay a US\$20 fee to enter the Galapagos and then go to a nearby scanning section to have all your luggage checked and permitted for entering the Galapagos National Park. If you line up to check in first you may then be too late to go back and do these requirements in time to board your domestic flight. Please check with your travel agent for any up to date changes in entry requirements.

When to visit:
There are 2 seasons in the Galapagos Islands: Wet and Dry. They fade into each other so there is no strict dividing line but they can be generally characterized as follows: January to June is wet season with sunny spells either side of the brief but impressive showers which can occur daily. This period has warmer water temperatures generally fluctuating between 20 - 28°C during this time. Dry season, more or less from July to December, sees less rain but is also cooler above and below the waters. Water temperatures in dry season are usually 16 – 23°C.

Currency:
US dollars.



This curious sealion simply swam over and sat down and watched us.



Two hammerheads cruise in at Darwin's Arch, in the distance we saw hundreds.



Silversides dropping dead from exhaustion were too much for the morays and predators to handle.



Beauty is in the eye of the beholder, the face of a marine iguana.



Sealions integrate into human infrastructure, sleeping on the docks at Santa Cruz.



An oceanic mantaray cruises past at Wolf Island.

Galapagos Aggressor III Information

Yacht & Voyage Specifics:
A luxury 30m steel mono hull motor yacht accommodating up to 16 guests. All staterooms feature air conditioning, en-suites and all have picture windows or portholes. Galapagos Aggressor III voyages are 7 days in duration with 3 dives per day (plus some night dives) plus snorkeling opportunities. Your stay on the Galapagos Aggressor includes all diving, meals and refreshments including wine and beer. All diving is done from pangas (inflatable dinghies). Nitrox is available and I recommend it highly for multiple diving days.

Electricity & Camera Equipment Capability:
US style outlets (twin flat pin) with voltages of both

110v and 220v. Two camera tables and a charging station right on over the dive deck with compressed air. Two separate rinse tanks are maintained purely for camera equipment.
Gratuities (Tips):
Totally voluntary and if you wish to tip it is based on the quality of service you have received.
Airport Transfers:
If you have booked with Aggressor Fleet a representative will be there to assist you for your domestic flight out of Ecuador. You will be met by an Aggressor representative at Baltra airport and transferred to the Galapagos Aggressor.
Aggressor Fleet Website:
www.aggressorfleet.com



The elusive Galapagos bullhead shark, a species of horned shark.



The stunning view Bartolome Island summit, location for the movie "Master and Commander."

iguanas were able to hold fast in the surge, as a diver with scuba tank and camera, for me it was not so easy and almost impossible to compose the shot and make sure the eye was in focus. Eventually our hour was up and with my legs sore from fighting the surge I finished the dive anxious to look at my shots but also with a feeling of great satisfaction at having witnessed what is possibly one of the most unique creatures of the Galapagos.

The Aggressor itinerary offers you land excursions on your last day and during your voyage. This gives a great insight into Galapagos above water, including land iguanas, giant tortoises, pink flamingos, sea lions ashore as well as the resident population of

penguins. However if you are travelling to these incredible islands I recommend that you also spend several days on land and join some of the many tours available. Here you can see the giant tortoises which are the iconic Galapagos species as well as Darwin's finches, three species of boobies including the aptly named blue footed variety, marine iguanas, pelicans, sea lions, frigate birds, albatross, tropic birds, Sally-light-foot crabs, ghost crabs, Galapagos herons and more. Stunning landscapes and seascapes of shorelines, lava formations, mangrove forests, and reefs. Many destinations describe themselves as equal to the Galapagos but once you have visited these islands you realise that none compare.



A marine iguana feeding on the green algae.



Two marine iguanas head back to shore for a thaw out.

Marine Iguanas (*Amblyrhynchus cristatus*)

Habitat:

Found only in the Galapagos Islands and can be seen throughout the islands on the rocky shores and marshlands next to the sea.

Size:

They vary in body size (200 – 300mm) depending on which island they inhabit. Those living in the coldest waters to the west on Fernandina and Isabella are the largest at around 12 – 13kg, whilst those living in the north-eastern island of Genovesa are much smaller at only 1 – 2kg. This variation is due to food availability (algae) with variation in water temperature.

Characteristics:

Colour ranges from completely black to grey and adult colour can vary during the season. They have a row of dorsal spines run the length of the body, these spines combined with a strong broad tail aid

in swimming. They sun-bake after the chill of the night and between dives to regain body temperature. They snort from their nostrils which adds to their unfortunate descriptions but this is an essential process where they are excreting excess salt from their bodies after eating the algae from the sea.

Diving Ability:

Information varies, but it is believed the large males have the body mass to withstand the temperatures of diving deeper, up to 15m and that smaller males and females forage in shallower waters. Statistics of dive duration also vary, with some sources stating up to 45 minutes but an average dive time of 10 minutes.

Reproduction:

Mating begins in the cold and dry season. Males are selected by females purely on body size (larger). One month after copulation between one and six eggs are laid in deep sand or volcanic ash which then hatch around 3 months later.