

# Nuarro Diving

## Dear Diver,

Nuarro is situated in the **Nanatha Half Moon Bay** at the southern point of the larger Memba Bay on the Baixo do Pinda Peninsula at, **S14° 12.20' E 040° 40.67'**, within the Memba District of Nampula Province, Mozambique.

The **Peninsula** is almost an island connected to the mainland by a spit 5km wide and around 1km long. This peninsula juts out into the **Mozambican Channel** and is very close to the **continental shelf**. This means that the prevalent type of diving is wall diving and its location out into the channel exposes it to currents which constantly bring fresh nutrients. The peninsula has a circumference greater than **20km** and is situated between two bays i.e. **Nacala** and **Memba** both of which have dive sites and also support mangrove systems. This extensive area of reef provides the diver with some wonderful opportunities for **underwater exploration**.

The Nanatha Bay is ideal for all levels of diving because it offers the diver entry from the shore, with a **natural buffer** to the prevailing currents and has a gradual sloping bottom topography that slowly slips away towards the start of the shelf which sits just **200m** from the beach. The characteristics of the reef are typically fringing reef that are common in the Red Sea and Caribbean.

## Zones

The first point of interest is the inner **lagoon zone**, this region consists of very shallow channels between the inter-tidal beach rock and has extended areas of sea grass. It is often covered with algae and sea grass and is populated with **brittle stars**, sea urchins and many tiny juvenile species. It is an interesting area for investigating at low tide when the sea has receded leaving exposed **rock pools**. Many species of juvenile **moray eels**, sea snakes and other juvenile fish varieties can be spotted by just walking over the rocks. This area can be snorkelled at high tide.

After the lagoon zone you will find the eroded coral heads. This area is subject to slight long shore current and moderate wave action. It is generally **2m to 5m** in depth. The coral heads may be covered with smaller **epizoic corals** and soft corals. Brown algae and sea grass occupies large areas. The sea urchins, starfish and brittle stars occupy crevices. Snapping shrimps and their symbiotic **gobies** inhabit burrows in the sand. There are numerous sand patches fringed by the coral heads in this zone and make for perfect snorkelling, diver training or **final safety stop** areas.

The **micro atoll zone** offers larger flat topped coral heads subject to a slight long shore current and moderate wave action. Here the stony corals some 2m high, grow outwards from dead centres. Less common are the **bushy yellow soft corals** and mustard-hued fire corals, which can be found on the north side of the Memba Bay. Crabs and shrimps, including the secretive **mantis shrimp**, can be found here sheltering amongst the corals with the **gastropods** habiting sandy pockets. Many small species of reef fish are also to be found in this zone, such as the **scorpionfish**, anthias, dottybacks, cardinalfish, butterflyfish and **wrasses**. Masses of chromis populate the coral heads. **Anemones** also occur in this zone and many anemonefish and crabs can be spotted mingling amongst the tentacles. Depths tend to be around 5m to 8m and offer excellent conditions for a **night dive**.

**100 to 150** metres from the shoreline you will reach the reef platform and back reef. Here,

# Nuarro Diving

wind driven water, displaced by the long shore current flows back through channels. Small tunnels and canyons are formed in the reef flat. **Massive corals** of the micro atoll zone coalesce to form the back edge of the reef flat where rubble, dead coral and sediment are cemented together by the **calcareous red algae**. Closer to the reef edge, mucus nets of the worm snail cover the corals in which they live and the colourful **giant clam** can be spotted in amongst large areas of elephant ear coral. The slate pencil urchin and brittle star hides in crevices. **parrotfish**, damselfishes and angelfish are common, as well as many species of wrasse. Blenny's can be found poking out of their holes and **dartfish** diving back into theirs. **Spadefish** group on top of the reef flat, interspersed with surgeonfish and tangs. The unicornfish is common and so to is the moorish idol. **Triggerfish** warily move underneath you and toby's peak out from the coral covers to see if the great lurking diver has passed. Boxfish and **trunkfish** flutter along at a leisurely pace seemingly not too bothered by much at all and puffers can be seen lazing in crevices or patches of sea grass. You might well encounter a **sea turtle** on the reef flat usually it is of the **green** or **hawksbill** species.

The reef margin and upper fore reef slope, this is now the seaward edge of the reef flat, is subject to wave induced turbulence and rip currents on a spring tide. Here the reef margin is dissected into alternating ridges and deeply notched canyons and tunnels termed the '**spur and groove zone**'. The wave assault is stronger and the more predominant coral is the plate, table and branched fire coral growing against the prevailing current. In calmer areas, the predominant corals are the branched type. Enlarged side channels may have depressions and chimneys with the same coral community as the back reef. Massive **porite corals** hundreds of years old occur on the upper slope as well as large tabular corals. The gorgonian, soft coral and cup coral occur in the shadows of overhangs. The hermit crab, gastropod, bivalve, starfish, **crinoid**, giant clam and **Christmas tree worm** are common. Here you can expect to find large groups of **giant trevally** stealthily moving between the rock formations. Lonesome **barracuda** can be seen moving along the back reef with **schools of snapper** congregating on top of the flat reef. Fusiliers, sweetlips and grunts are common.

The lower fore-reef and pinnacles at the base of the seaward reef slope consists primarily of coral rubble and sand, in some areas the base of the pinnacles cascade down into sand falls. One spectacular aspect of this wall is the fields of plate coral that descend into the deep murky depths. The bottom of the wall sits at between **35m to 60m** and then gradually falls away to depths in excess of **1000m**. Large coral pinnacles rise from the base to the surface. The northern margin typically faces the wind induced current and is covered with abundant coral growth while the southern margin is relatively barren. **Rich coral growth** typically covers the walls. In areas exposed to current below 25m there may be large black coral trees and large gorgonian fans.

## Dive Sites

**Anemone Gardens** and **Gobi Sands** are found directly in front of the **Activities Centre** about **100m** from the shoreline. This is an easy leisurely dive down to **10m** that can be done at most times of the day and is spectacular on a night dive when the **bio-luminescence** is active. This is a real photographers playground with great opportunities for spotting shrimps (esp. mantis shrimp), crabs, gobies, **egg cowries**, nudibranchs, flatworms, **coral heads full of chromis**,

# Nuarro Diving

butterflyfish, wrasse, damselfish, large schools of tangs, **bluespotted stingrays** and moray eels.

Further on from the Gobi Sands can be found the **Sea Grass Fields**, this is an unusual site in that you don't have the typical coral topography, but it does afford an interesting alternative to the norm. We include this area as part of a more **extensive investigation** of the local reef system. Within these grasses a stunning array of fish species can be found. One fish type we haven't found the name for yet **mimics the grass** by standing on it's head swaying exactly like the grass. It's body is a perfect match to the colours of it's home. It will take a **real keen eye** to spy them out. Pufferfish, moray eels, gobies, **flounders** and shrimp are all common here.

Once you leave the Sea Grass Fields heading outwards you will finally reach the wall where **five pinnacles** stand, we have named these **The Guardians**, due too their location facing out to the open deep blue as if in a line of defence against the oceans force. They stand in **40m** of water and finish **15m** below the surface. This is part of the **Nanatha Wall** that runs semi-circular throughout the whole bay. You can follow the wall to the left or the right, or alternatively just hang with the Guardians and enjoy their delights. Part of this wall breaks into a **sand falls** that spills out from the back reef and cascades down the upper fore reef slope. You will also see several **swim throughs** and many nooks and crannies to be investigated.

**Island Rock Dive** is a continuation of the Nanatha Wall to the west. The wall makes a definitive ninety degree bend here and then runs out to the Nuarro Point. Massive fields of **table coral** can be appreciated here as well as a **diverse range** of other corals that include elephant, acropora, mountain and dome types. The island rock is a feature close to the shore that marks the entry point for this dive spot.

Further along from the Island Rock Dive you can experience some current diving off the **Nuarro Point**. This is where the Nanatha Bay ends and the area known as **Muarussi** begins. The wall continues on into the main bay for several more kilometres. Larger fish species such as trevally (**kingfish**), tuna, barracuda and snapper all frequent this point.

On the opposite side of the bay to the east is the **Nanatha Point**, this on a spring tide can have current, strong enough to make it difficult to swim against. At these times we arrange for a drift dive. Again larger species of fish can be found here, we have seen **humpback dolphins** on this point. The pilot of the pod came, **within metres of us**, checking out what these strange neoprene clad creatures were doing in their habitat. Dolphins are usually an indication of other larger life being in the vicinity and the local fisherman inform us that **sharks** are found on this point. The main feature of this site is the huge **gorgonian forest** which runs for a 100m or more along this part of the wall and can occupy a whole dive. Photographers will love to get a shot of the **longnose hawkfish** perched on it's gorgonian home.

Moving on from the Nanatha Point there is a wall that runs for the complete circumference of the **Baixo**. This has somewhere in the region of **15km of wall diving** and an endless amount of dive sites. There are several **wrecks** on this wall and some spectacular drops to the deep blue. The opportunity to see large and small fish life is abundant, generally this would be done as drift dives and can only be available to the more experienced diver. We have still to dive many of these areas, we are looking forward to many years of **future discovery**.

Opposite Nuarro on the north side of Memba Bay we have visited a very special spot that has masses of soft corals and fish life, dispersed along a shallow wall that is divided by **channels** running the width of the rock. A diver can easily descend down into these and follow them to the

# Nuarro Diving

outer reef. This can be appreciated by all levels of diver, but it is around a one hour boat journey, one way, from Nuarro.

## Other Dive Locations in Southern Africa

Many people ask us, '**how does Nuarro compare with other diving destinations?**' It would take a big study to actually answer that question accurately and we do hope to invite or attract **marine biologists** to this area in order to better understand what is the complete range of coral and fish life and what level of health it is in. One thing is for sure that this region is a **divers dream** for it offers unlimited dive exploration and an abundance of species that all need to be identified. If you have any sort of interest in marine life then this location will have you a **buzz** with what is on offer.

To compare our sites to say southern **Mozambique** and **South Africa**, then our coral life is most definitely more extensive and in better condition and offers a much greater diversity of life. The ability to make beach entrances is very unusual for this coastline and the natural protection of the reef and our protection from the prevailing winds means that conditions are usually excellent.

One element we are blessed with is the amount of visibility generally available. Due too the peninsula's location out in the channel it is constantly cleaned by the Mozambican Current. There is also no river run off into the sea, so **visibility can be 40m+** and never drops below **10m**. The shrimp life is on a similar par, but schooling reef fish is better here. Certainly what Southern Africa does have a lot of is, sharks, if you go to the right locations like; Cape Town, Protea Banks, Sodwana and Ponto do Ouro. But, most of the time this is all you see and it can be disappointing to go out, especially for one sighting and not see anything at all. So, we feel our diverse range of species is of greater appeal.

Barra and Tofo in Inhambane can offer the whaleshark and manta ray dives and this is very special. At the time of printing, we have not seen a Whaleshark or Manta Ray in the Memba Bay, but we do hear reports from the fisherman of **manta rays** being found here, so it is up to us to find where their hang outs are. Maybe you could be the person to find them with us!? We will keep you posted, if you sign up for our newsletter.

One special feature we feel confident to provide is kayaking and snorkelling with **humpback whales**. We will try it out this year from **July** until **November**. The local fisherman spend all day on their small dug outs with the whales swimming past them, neither seems bothered by the other, so we believe as long as we show them great respect, then they will also let us experience there awe inspiring magnificent beauty.

We hope you have found our brief guide to the diving opportunities at Nuarro, informative and interesting. We look forward to diving with you soon!

Regards

The Nuarro Team

N.B. The passages on **Zones** were taken from the very informative book on marine life, 'Coral Reef Guide Red Sea', by Ewald Lieske and Robert F. Myers.