



1. Silverio Zecca with one of Dahlak's morays. The arrow of the spear-gun is still deeply embedded in the serpent's gills. These morays proved themselves among the more aggressive and dangerous animals of the Red Sea; their strength is enormous, their temper violent and their bite lacerating and poisonous.

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WITH THE ITALIAN NATIONAL UNDER-
WATER EXPEDITION IN THE RED SEA

DAHLAK

by *GIANNI ROGHI and FRANCESCO BASCHIERI*

Translated from the Italian by Priscilla Hastings

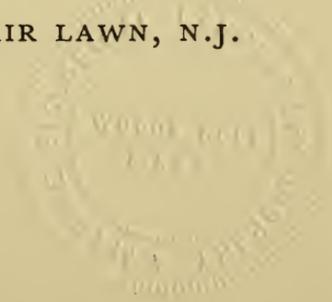
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FOREWORD

THE ITALIAN NATIONAL UNDERWATER EXPEDITION left Naples on 28th December 1952 aboard the 135-ton motor vessel *Formica* of Viareggio, and returned to the same port on 26th June 1953.

The team was as follows:

Dr Bruno Vailati, organizer and leader of the expedition and member of the sports group.

Dr Francesco Baschieri Salvadori, scientific director.

Lieut Raimondo Bucher, director of the sports group.

Enza Bucher, member of the sports group.

Dr Alberto Grazioli, medical officer.

Dr Gianni Roghi, writer and member of the scientific group.

Dr Luigi Stuart Tovini, member of the scientific group.

Dr Silverio Zecca, administrator and member of the sports group.

And in addition there were:

Priscilla Hastings, member of the scientific group.

Folco Quilici, director of the documentary film of the expedition.

Masino Manunza, cameraman.

Giorgio Ravelli, photographer and constructor of underwater photographic and cinematographic equipment.

The crew comprised:

Giuseppe Solari, Captain.

Michele Mollo, second in command.

Maurizio Solari, mechanic.

Giuseppe Fortunati, sailor.

and was completed at Massawa by:

Sayed Alawi Saleh, '*nacuda*' pilot.

Omar Mohammed Ali, cook.

Mohammed Lugud, sailor.

Asgodum Negasci, ship's boy.

The Official Report of the Expedition stated:

'The group, which was charged with scientific research and the collection of biological material, adopted largely the direct method for both observation and collection, that is to say it carried out the greater part of its work strictly in the underwater environment. Indirect methods with lines, triple nets, 'coffe', plankton nets, etc., were also used, though to a lesser extent. Underwater equipment and the direct method permitted observations of great scientific value to be conducted on the habitat and mode of living of species belonging to the most varied biological groups of marine fauna, and made possible a detailed examination of the tropical marine 'biocenosi' of the coral barrier. About 800 pounds of fish of scientific interest were collected and preserved in formalin or in alcohol or dried. About 300 species of molluscs were collected, about 50 species of echinoderms, about 60 species of celenterata (mostly madrepores and corals) as well as a large number of sponges, worms, jelly-fish, crustaceans and specimens of plankton from greatly varying areas, all contained in 53 zinc cases. A collection of skulls and eggs of local birds was formed in spare moments. It is estimated that in all over a thousand different specimens were collected, in most cases two or three of each. This result was made possible above all by the adoption of the direct method in the underwater environment. When the material has been thoroughly classified, a task that will take probably two years, a further small step will have been made in the scientific exploration of the sea-bed. To anticipate the final result, it can be foreseen that a number of marine animals either completely unknown or at any rate not to be found in existing museum collections, or so far never indicated in the Red Sea, will have been brought to light.'

To which remarks we would append the following notes:

(a) Our observations and collections were concentrated exclusively on the live madreporic environment, and up to a depth of sixty feet. Therefore all the animals collected by us were part of this habitat, with the exception of a number of pelagic fish captured during their crossing of this habitat.

(b) Work was carried out on thirty-two islands, peninsulas and islets distributed along the Red Sea's western coast, particularly in the southern sector (the archipelago of Dahlak).

(c) For prolonged immersion auto-respirators containing compressed air were used, of the Italian Micro type. This apparatus, modified and perfected, is to-day manufactured under the name Aquasub.

(d) At the time of writing this book only a very small part of the material brought back has been studied; Italian and foreign specialists are still engaged on this work. A true evaluation of the enterprise is therefore not yet possible.

*

The National Underwater Expedition, planned and organized by Dr Bruno Vailati, was patronized by the Goggler Club of Milan, and recognized by the Federazione Italiana Pesca Sportiva, the Comitato Olimpico Nazionale Italiano, and the Federazione Medico Sportiva Italiana.

It was also recognized by the Ministero della Pubblica Istruzione, the Istituto di Zoologia of Rome University, the Museo di Civico Storia Naturale of Milan, and the Istituto Centrale di Idrobiologia.

The members of the Expedition wish to thank all those institutions which, with material and moral support, contributed to the realization of the enterprise. They would also like to thank the commercial and industrial companies which generously

furnished the expedition with materials and provisions, and those private persons whose sympathetic interest was so encouraging: Messrs Virgilio Cella, Silvio Ghezzi, Iginio Guagnellini, Gianni Krumm, Emilio Panzera, Renato Picollo, Ernesto Piletti, Cesare Rasini, Attilio Riva and Howard Scott.

The National Expedition thanks the Ethiopian and Eritrean authorities for the very warm reception it was accorded in their respective countries, members of the Italian diplomatic corps in Eritrea and Egypt who showed a kind and practical interest in the expedition, and lastly all those fellow-countrymen abroad and friends at home who actively and disinterestedly collaborated in the success of the enterprise.

CHAPTER I

TROPICAL BAPTISM

IT was night in Massawa. I had been there just two hours. Two days before I had been in Rome. Going down the steps of the Ciao Hotel, which looked for all the world like a great bungalow, I kept repeating to myself that this was indeed Africa. At last. And as, in the dusk, I walked among the palms, I realized that all the hard anxious planning of the past year was now at last behind me.

The town of Massawa was three-quarters of a mile away; to get to it I had to cover the narrow causeway that joins the old coral island to the mainland. The road was deserted; faint lights gleamed at the end of it. The atmosphere was stifling, palpably wet. There was no point in breathing deeply for the air was almost water, hot water.

I walked on in the Massawan night, sweating. I was soon gently soaked. It was 26th January; in Milan there'd be snow and fog . . . neon lighting, crowded streets, all the hubbub of the great metropolis that was my home. And here I was looking for tropical fish, sharks, morays, mantas. . . .

Suddenly the smell of the sea was there on my right . . . a black, silent, waveless sea—the Red Sea! I was really there. I had reached my goal. I could dip my hands in the Red Sea! I crossed the road at a bound and went down on to the shore to find there was no water, but only a stretch of thick

black mud which sucked at my shoes. I grinned. At least I had become acquainted with the tide, about which I had read so much.

I walked on towards the lights still telling myself that on the morrow a new and fabulous world would be opened to me. A shiver of anticipation ran down my spine.

*

‘So you’re not frightened of sharks?’

‘Good God!’ I thought, ‘I’ve been asked this hundreds of times.’ I glanced at my companions round the table in the Bar Savoia; they were all Italians who had heard about the expedition. They knew about *me* too, as they had read an article of mine on sharks which had been reprinted shortly before in one of the Eritrean dailies. My arrival had been expected and I had been given the sort of welcome that only expatriates receiving a fellow countryman can give. Now they wanted to know everything and above all they wanted to talk about sharks. They considered themselves experts on the subject simply because they lived in Massawa, and therefore tried to tell me, not without a hint of superiority, that the sharks I knew were one thing, but the sharks of the Red Sea were quite another.

One of them poured me a glass of beer. ‘So you want to go to Green Island? I saw an eighteen-foot shark there yesterday, you know.’

‘Yes, and I was bitten by a blue shark,’ said a small, powerfully-built man pulling up his trouser leg . . . ‘look here.’ At the base of his calf was a large violet scar. He said he did odd diving jobs.

‘At Ras Dogon, not a mile from here,’ a third put in, ‘I saw more than a couple of thousand of them all together.’

What a sight it was!

But it was what the second man had said that really interested me.

'Tell me,' I said, 'what did you do to the blue shark?'

'Me? Do to it?' He seemed amazed at my question. 'Nothing!'

'Do you mean to say that it attacked you without your having disturbed it or harmed it in any way?'

'Of course!'

'How big was it?'

'About three feet.'

'Were you working on the sea bed?'

'Oh no, I was in four span of water pulling in the net.'

'Ah! Then the shark was in the net?'

'I should say it was. Thrashing about like mad!'

I settled back in my chair. It was the same old story; man takes it out of animals and then protests when these unfortunate beings defend themselves in the best way they can.

'It isn't that I'm not frightened of sharks,' I tried to explain at the third beer. 'I'm as frightened as the devil; but I've come here to find out if sharks really merit all this *amount* of fear.'

But a discussion based on air like this one was is much better drowned in beer. Humanity has definite ideas about sharks, crystallized in oral and written tradition, adventure stories, newspaper articles, novels, the testimonies of sailors and fishermen and a hundred treatises on popular science, and sees them as the most uncanny and fantastic creatures on God's earth. Now, however, the legend has had its day. It is quite out of the question that sharks turn upside down when eating, that pilot fishes guide them, that they are extremely aggressive and courageous, that they eat anything and everything all the time (including the classical bottles thrown into

the sea), that they travel normally with the famous triangular dorsal fin on the surface, and so on. There's not an atom of truth in any of this.

But when you're sitting in front of a cool beer a hundred yards from the Red Sea on a warm Massawan night, how can you with a few words destroy a conviction that has its roots in antiquity?

I got back late to the hotel, retracing the long wet walk. The stars were opalescent and the mud on the beach stank of rank seaweed. I was dog-tired. I told myself it was the climate, although it may have been anxiety for the morrow. For the *Formica* was to arrive the next day, and a task that might take weeks or months was due to begin. 'To-morrow,' I told myself, 'I shall be swimming in this sea, *under* this sea.'

I lay awake for a long time in my hot bed. Outside, beyond the veranda, the crickets were shrieking on the papyrus and in the tall palms; shutting my eyes I felt for a moment that I was back in Lombardy, in August.

*

The *Formica* arrived the next day, 27th January. She had had a disastrous trip through continual squalls and stormy weather, yet she had continued to plough southwards while even the biggest ships remained in port. When she finally reached the Red Sea she stopped among the first of the coral islands beyond the gulf of Suez where at last she found peace on a quiet sea. At Shadwan my companions had their first dip in tropical waters, unable to wait longer for their first sight of the sea-bed. They had been amazed and excited. It was at Shadwan too that Cecco (Dr. Francesco Baschieri Salvadori, Lecturer at the Zoological Institute of Rome University) made quick friends with a devil fish (*Pterois*

volitans); then it pricked him with its poisonous spines and put him out of action for five days. They had another dip at Kosseir, a small Egyptian port, where the Italian colony of about fifty families gave them an affectionate welcome. Here they caught some interesting fish.

In the open sea between Shadwan and Kosseir they had taken part in the fifth act of an ocean tragedy: a twelve-foot shark (probably a mackerel shark) was devouring on the surface a two-hundredweight sword-fish already reduced to a whitish carcass. The *Formica's* engines were silenced and the vessel drew near without a sound. Gigi (Luigi Stuart Tovini) flung the harpoon but missed. Cecco lifted his Browning and shot the shark in the head, but it took no notice. Finally Bruno (Dr. Bruno Vailati, leader of the expedition) planted the harpoon with all his strength between its gills. For a moment the shark remained immobile, then it turned on to its grey stomach, snapped the two-inch thick beech shaft to splinters, and disappeared into the depths, still with the steel point of the harpoon hooked into it. Gigi tried hard to hold it by the line but in a moment this was drawn quite taut, and zing! broke clean in two as if it had been a piece of thread.

The remains of the sword-fish furnished the '*Formichieri*' with food for three days. Little had it thought, poor beast, that it would fight a battle in the depths, become a floating corpse, and finish up fried and boiled by the executioners of its assassin.

A handsome dolphin was also caught by harpoon, once more the work of the specialist, Bruno. Then another bad sea hit the *Formica* and she had to do battle with a violent storm before finally she tied up at Port Sudan, to re-fuel. With the wind on her stern she at last entered Eritrean waters. On board a painful month was over, a month of turns at the

helm, turns in the engine-room and seasickness. The morning was glorious, and as the gallant little ship entered harbour the seagulls of Massawa flew up with a great fanning of their wings to salute her. Still a little shaky, my companions greeted me warmly.

*

The Eritrean authorities were at first not too happy about the arrival of the *Formica*. (Eritrea, incidentally, is a state federated with Ethiopia.) We had met our first difficulty when we had applied at the Ethiopian Embassy in Rome for visas. The answer had been a categorical 'No' and no amount of urging from influential quarters could change the decision. It seemed that we were suspected of having motives of espionage, but in view of the fact that most of the charts of the Dahlak zone were Italian anyhow and that in the entire region there were no civil or military installations of any kind, the spy theory was abandoned. But only to be replaced by another. Could not an expedition which called itself the Italian Expedition be disguising aims that might be nationalistic, patriotic, nostalgic, or what you will, aims in short that might be calculated to stir up the local Italian colony and make them restless? This suspicion was perhaps legitimate enough; too few years had passed since Italy had become separated from Eritrea forever, and there were still too many Italian colonists who were not resigned to it. Why, reasoned the Ethiopian authorities, should an Italian scientific expedition choose as its base Dahlak, which belonged to Eritrea, out of all the thousands of other tropical archipelagos in the world?

But for all the honesty and sincerity of all the counter-arguments we were able to advance, the Ethiopian government remained unconvinced. Direct contact was the only

thing, and there followed an interminable series of bureaucratic, official and officious meetings at Massawa and Asmara. As a result we were tolerated. That is to say we could conduct our researches, but only under certain specified conditions. We were allowed to work in certain places only, we could not use our dinghies, fire-arms were prohibited and we had to remain under constant surveillance from the customs officers. This continued for a couple of weeks until we managed to get H.E. the Viceroy, Andergacciou Messai, directly interested in us. From that moment Dahlak belonged to us; we were the guests of honour of the Eritrean and Ethiopian governments, the pet of the authorities and the cynosure of every newspaper editor. Not a week went by without our activities appearing on the front pages of the Eritrean press. Our meetings with sharks were reported; our meetings with important personages were reported; Bruno Vailati's lectures were reported. But of the sudden blooming of this new friendship, more later.

The reasons why we did in fact choose Dahlak were few but good. First and foremost the cost of the enterprise had to be considered: we wanted to conduct an expedition in a tropical coral sea; the Red Sea answered our needs perfectly as a 'classical coral sea', and it was at a reasonably easy distance from Italy. To find a comparable coral formation, with its appropriate fauna, we should have had to cross either the whole of the Indian Ocean or gone the other way to the East Indies. Our finances would never have stretched to this. Secondly, the French expedition on board the *Calypso* had already carried out over a month's exploration of a large zone of the islands of Farsan, and the Austrian Hans Hass had thrust his nose well into the waters of Port Sudan, whereas at Dahlak not one underwater explorer or researcher had as yet flapped a fin. Dahlak, too, had the

advantage of lying a few dozen miles from a good base, Massawa, and finally it was notoriously rich in fauna and coral formations of extreme interest.

It would not be going too far to say that the Red Sea is perhaps the strangest and therefore the least known of the seas of the globe. Its coastlands are desert, stripped by the sun, and desiccated by salt and coral left behind by the retreating sea. It is also an unapproachable coast because of the uninterrupted series of rocks and coralline islands which rise barely above the surface of the sea like the yellow backs of huge cetaceans. Only the central strip is free from coral formations and vessels take good care not to deviate from it.

Almost bare of ports, suffocated in warm and humid vapours, salt as an anchovy, burning as a hot bath, bluer than most seas, the Red Sea has yet other characteristics that make it in some ways even mysterious. It is a sea of legends and witchcraft, a sea on whose islands the Dahlakians fear to tread, (for on them you die, they say, and in truth many have died), a tongue of hot water between Asia and Africa that has gathered unto itself the secret soul, the kaleidoscopic images of two continents. The Red Sea has fish that belong to it alone, animals of uncertain origin and mysterious metamorphosis evolved over millions of years; it hides creatures unique in the world and receives others from the Indian Ocean and even the Mediterranean: it is the Paris of the world's oceans.

*

'Mr. Gianni, there! You see? Shark!'

Mohammed pointed towards a sharp line of clear-cut fins on the surface. They circled round and round as if searching for an entrance through the rocks of Sheikh Said, the island that sprouts from the sea three-quarters of a mile from

Massawa and is known to the Italians as Green Island. It was the first time we had been near it and the moment had now come for us to get into the water and have a look at it.

It was the afternoon of 28th January. The profile of the island lay low and very green, like a huge thick bush floating on the sea. It is six hundred yards long and at the most two hundred wide, while all around for a radius of a quarter of a mile lies the submerged platform of coral and coralline sand.

‘What? Sharks—these? Cecco, do you believe it?’

There were five of us in the boat; Cecco, Priscilla Hastings, Gigi and me (the ‘scientific nucleus’ of the expedition), and the Mussulman boatman Mohammed, who was rowing us for four Eritrean dollars per day. The boat, his own, was long and nimble, and had a canopy to shade us from the infernal sun. Sharks? Those? With such pale slender fins?

‘Sharks, sharks,’ swore Mohammed and grinned. ‘Look careful . . . um . um . . . he eat you!’

There were ten to fifteen fins on the surface. If they really were sharks we should be received in great style. At the point where they were now, the water must have been about nine feet deep. . . . We exchanged glances. If Mohammed said so, then sharks they must be.

‘Well, let’s go and see,’ muttered Cecco.

But as soon as we got anywhere near, the fins disappeared and the sea became suddenly deserted, flat as a table, hushed. The boat swung on alone. There was now nothing for it but to get into the water.

‘After all,’ said Gigi, ‘that’s what we’re here for, aren’t we, chaps?’

One by one, we went in, dipping our legs unwillingly in the hot, yellowish water. It was six feet deep here and visibility was about the same distance. We kept close to each

other, almost elbow to elbow. We had had a meeting the previous evening to hammer out a plan of campaign and we had agreed that we should on no account lose sight of each other in the water; each must keep an eye on the others and each in turn would be the group captain; he was to be followed even at the cost of overlooking or leaving unstudied things of major interest. We struck out. We had to cover fifty yards across the shelf before reaching the edge that fell rapidly into the dark depths.

I looked around and felt a shadow of uneasiness creeping over me. I could see nothing but the intense yellow; it was as if an unmoving, endless rain was suspended around me. It was plankton, but at that moment I could take no interest in it. I'd have given the world to be able to see a yard or two more, to have seen the sea floor which the sixth sense we 'old underwatermen' have, told me was falling away beneath me. It must be about nine feet now; those fins were here before. Soon I could bear it no longer and dived down to the bottom. It was clearer there, clear enough to see the landscape below me . . . a stretch of ochre-coloured sand dotted with sea cucumbers, small shells, holathurians and tottering hermit crabs, bulging here and there with small madreporic blocks: the corals. I touched them, looked under them, and realized how many times I had seen them, in museums . . . and now . . . but they were not the same, not white but brownish, knotted with strange living things. On emerging I noticed that my companions were twenty yards further on, all together. The strange panic returned. 'Here I am,' I pondered confusedly while returning under, 'all alone in the Red Sea in the very spot where those fins were before.' I hurriedly swam further out but, unable to find the bottom, sank still further and at fifteen feet found myself suddenly in the middle of the coral barrier. It was the shelf.

Like all not very recent madreporic formations the islands and coasts of the Massawa-Dahlak region are 'belted' consistently by a sandy platform (or terrace) strewn with madreporic blocks of no great size (about two or three yards maximum in diameter). The edge of this terrace can thrust itself into the sea for some dozens or even hundreds of yards, and is almost always marked by a 'crown', or barrier of living coral. The barrier falls fairly steeply, sometimes perpendicularly, for twenty to fifty feet on to a new bed of sand, the ulterior slope of which descends smoothly and not too rapidly towards the succeeding and decisive shelf (or drop) that ends the continental plateau, and from there sinks hundreds of yards into the abyss.

Our studies and research were to be pursued in the littoral sector of the platform and the madreporic barrier (a sector comprising a depth of about sixty feet). In this zone, and above all among the corals, the equipment of non-underwater naturalists has never brought any great success; nets get torn to pieces on the branches of the petrified forest, and fish-hooks catch relatively few fish of relatively few species. We, on the other hand, could use a very different technique, and our results did in fact surpass all hope or expectation.

There I was then, face to face with the famous coral barrier for the first time. I must confess that it looked a pretty miserable thing to me and I was almost disappointed. The more twisted and ramified corals formed, it is true, an entanglement astonishing in its morphological variety, but when I decided to go down as far as the base of the shelf to search for the sand, I knocked my nose on the bed of the sea about twenty feet down. The barrier was only fifteen to seventeen feet in height, a thorny brown wall in the turbid water.

But it was a wall that moved, that swarmed. Again I went

down, following my companions who had come up for a gulp of air and were returning at the run. The wall breathed; thousands upon thousands of creatures circled, crawled and slid in and out of holes, bursting forth and drawing back, poking, gesticulating. The scene was as fascinating as it was frenzied. The tiny coral barrier was alive with an inconceivable multitude of minute iridescent fish playing hide-and-seek; the whole water heaved up and down, swollen with fish not only in shoals but alone and independent too, each doing his own job, fending for himself, hunting for food, for a mate, for a lodging and safety. I was awestruck. I glued my face to the wall's undergrowth forgetting the anxiety of a minute ago, all fear evaporating in the enthusiasm of the moment.

We stayed there the whole afternoon, learning to look for things and beginning to find them. I dragged my first tropical moray into the boat (only a two-pounder) and found my first 'cowry' shell (known in Naples as a 'sea piglet'). I love them and so I collected them; unfortunately Cecco collected them too and they became a source of livid discord between us.

We had been immersed in the waters of the Red Sea. We were now her initiates. 'Serve me well and I will be prodigal to you.' And prodigal she was.

CHAPTER 2

SHEIKH SAID, GREEN ISLAND

AT eight o'clock in the morning following our Red Sea initiation, Mohammed took us again to Sheikh Said. Actually the island was of no great interest to us, but as our Eritrean visas had not yet arrived we had decided to study as much as we could where we could rather than laze about on the *Formica*. In the event the island provided us with our first surprises.

To get to it from Massawa, even by rowing-boat (to which we attached an outboard motor) was difficult, for a precise and complicated route had to be followed across the coral banks. The only navigable part of the bay is one narrow channel which in a century or two will also be filled with coral. All that will then be needed to get from Massawa or Taulud to the green peninsula will be Shanks's pony, furnished, however, with good thick rubber soles.

We dived in from the north-east of the island. The water was much clearer than it had been on the previous afternoon, although horizontal visibility was still reduced to a dozen yards. We could now watch the corals and their inhabitants with greater ease.

We were about five hundred yards from the island. It was low tide, and yellowish sand and the encrusted coral shelf emerged all round the great emerald bush of mangroves.

In two hours it would be gradually swallowed up and the water would reach the trees. We were five hundred yards out, and the depth was only twelve to fifteen feet at the most. It was only our second dive and we weren't yet feeling sufficiently intrepid to visit the invisible barrier further out. We tried once, but when the sand and madreporic blocks began to spread confusion about twenty feet beneath us, we decided unanimously in favour of discretion. The truth of the matter was that on finding ourselves in deepish sea, the anxiety of the previous day had returned. It was possible that there was no barrier there. We discovered later that this was indeed the case and we should have gone on ever seawards without finding it.

When we got back to the shallow water once more and saw the colours, the life, and those numerous kaleidoscopic animals again, our fears quietly receded and we returned happily to our watching, searching and poking, pointing out odd-looking things to each other like exuberant schoolboys, our hearts thudding with excitement. I made a brief calculation that in each cubic yard of water there must be an average of three six-ounce fish and a dozen smaller ones, all of them brightly coloured, lively and curious. I wrote, 'dazzling movement of fauna' in my diary. The sea-bed seemed like an ant-heap.

That day luck favoured me and I got the biggest catch: a ten-pound kingfish. It came fast and sure from the depths; two yards away it stopped short to look at me, then turned, and as it did so my arrow sprang into its side. The long and violent battle which ensued took me completely by surprise. I learned as time went on that almost all Red Sea fish are very much stronger than Mediterranean ones.

Gigi in his turn caught a decent six-pound pampano, also a tenacious fighter. I scored again with a chubby six-pound

greyskin, and then we ran into the other dinghy with Raimondo Bucher, his wife Enza, and Alberto Grazioli, doctor to the expedition, who were joining us from the opposite side of the island. They had caught a fourteen-pound grouper, the first of the large number we later found and caught.

'Have you seen any sharks?' we shouted.

'Not a sign of one.'

Yet we had been told that diving here would be suicide. And those fins yesterday . . . were they really sharks?

We were now on the east of the island. It was midday, and the shelf had once again vanished under the high tide. We had a quick snack of ship's biscuits and tinned meat in the boats. Poor Mohammed, a Mussulman, was forbidden the meat brought along by the heathen and had to make do on biscuits and bananas. After a while Gigi decided:

'I'm going back in.'

'It's pretty deep here,' I told him. Below us, a dozen yards down, stretched the barely visible sand.

'Join me. I'm off!' And off he went.

I hurriedly put on fins and mask, re-loaded the spear-gun and tied a knife on to my belt. I was sitting on the edge of the boat with one foot already in the water when Gigi poked his head up twenty yards away and shouted, almost calmly: 'A six-foot shark!'

I sat and stared at him dumbfounded. Then down he went again. I got up courage and plunged in. Noiselessly, searching feverishly through the murky water, I swam slowly towards him. Down below was that same strip of sand, seeming still more distant and now lying deserted. Gigi returned to the surface.

'He's gone.'

'Where?'

'Don't know.'

We went down again like bullets. But there was nothing to be seen, not a living thing. Perhaps he had really gone for good. What if he were behind me? I spun round . . . my God! . . . but no, he wasn't there either.

The boat continued nearer land. Gigi encountered a barracuda, followed it, tried to shoot it, but with a sudden jerk it disappeared. Barracudas too, then, those terrible barracudas, don't 'always and inevitably' attack man; they sometimes prefer to disengage. So, slightly reassured, we began work collecting. Within an hour the boat was overloaded with corals (some shaped like fans, others like ferns, others like elkhorns), shells and echinoderms found everywhere by lifting coral blocks and rummaging in the innumerable holes, clefts and crevices. In the evening, well pleased with our first Red Sea day, we returned to the mainland.

*

Work at Sheikh Said went ahead. We were still only experimenting with our methods and theories of research, but it was time well spent, for it meant that by the time we arrived at Dahlak we were sufficiently expert tropical frogmen to cope with the bigger and more strenuous experiences that met us there.

On 31st January we put the nets down for the first time, Cecco working them while I rowed. Dropping them vertically between the corals into the narrowing corridors of sand was a tricky business and time after time Gigi had to dive in to disentangle them from the petrified twigs of the reef. This made us realize something of the difficulties that non-underwater naturalists, working with nets in the coral

habitat, are up against; at the same time nets are the only device that can be called even fairly effective.

After the nets had been down for six hours we found in them small groupers, parrot fish, about thirty coralline fish and a three-foot black-fin shark that came up wild with rage, its head stuck through the first two strands of the net. When we had pulled it into the boat we found it was a female with four foetus, each the length of a finger, in the belly. These went into the formalin pot. We often captured marine animals on the point of giving birth; we had in fact hit the Red Sea in the season that corresponds to spring with us, a season that sees, especially from the middle of February to the middle or end of March, a large number of fish approach the shore, nearly all of them making last-minute love, giving birth, or laying eggs. On being captured, more than a few rays, stingrays and sharks tossed their hideous offspring into our hands and every day we found crustaceous animals, molluscs and other inhabitants of the deep full of eggs. We found, too, a mass of turtles' eggs and in nests and on the rocks an enormous quantity of birds' eggs and nestlings. Finally, in one of the most impressive scenes the Red Sea offered us, we assisted at what can only be called the parturition of the mantas. But one thing at a time. I will only add here that this fact of breeding near the coast probably explains the abundance of sharks found off the mainland and islands of Eritrea during the winter and in the early weeks of spring.

That day, while the nets worked alone, our spearguns were not idle. I opened the day's catch with a picturesque ten-pound eagle-ray, a tremendously energetic one, which I shot in six feet of water. Its long rat-like tail armed with two poisonous saw-edged blades prevented me from disentangling my line from the coral and it took some patience, shrewdness

and hard work on my part as well as some help from my companions in the boat to get the better of him. Then, with much less trouble, I caught a six-pound grouper and a magnificent cuttlefish of almost four pounds. Cecco and Gigi were shooting as well, and Priscilla, a speargun in her hand for the first time in her life, was going in furious search of her first victim. We caught enough fish that day to fill half the first zinc case of the fifty or more we had on board. Gigi was lucky again and met another shark. He was in nine feet of water, filthily turbid as usual, when the six-foot beast swept ahead of him and vanished into the deep without giving trouble. It was most probably a black-fin. I, meanwhile, was playing around with three barracudas, but at my first lunge with the gun they went off quickly, distinctly nettled. After this Gigi and I tried to get up to a small shark spluttering in four span of water with its back, fins and tail well out, but at twenty yards distance it smelt a rat and with a splash melted into the corals.

Big fish there were in plenty, sharks, barracudas and stingrays as well as those strange thin-finned creatures that seemed to be everywhere at all times, wheeling close inland yet always unapproachable, invisible, ghostlike. If it had not been for Mohammed's insistence, which threw us into uncertainty, we should have refused to believe that they were sharks.

While Gigi and I were swimming over an eighteen-foot sea-bed, the little coral barrier, Cecco gave us a shout from the boat:

'Oi, get on ahead quick . . . hurry up!'

'What is it?' shouted back Gigi.

'A huge black back, a thing that goes on forever. Run!'

'But what the devil is it?'

'How do I know? It hasn't got a dorsal fin.'

If it hadn't got a dorsal fin it couldn't be a shark. Gigi and I decided to go and see. Speedily, silently, we set off on the hunt and arrived very soon on the blue without noticing the depth, but no monster with or without fins was to be seen.

'Where was it exactly?'

'There, just where you are,' yelled Cecco as Mohammed worked the oars.

But mystery again. It had vanished. Could it have been a manta?

*

There were five of us in the water on the south-east side of Sheikh Said, well out from the shore. Giorgio Ravelli and Folco Quilici had been detailed to fish for shells and corals and go searching eighteen feet down with Cecco, while Gigi and I, guns in hand, were swimming about fifty yards further out, still on a thirty-foot depth, trying to capture some chunky parrot-fish (each a good six or seven pounds) which were roving slowly between the rocks beneath us. These thick-set parrot-fish with pig-like snouts move in small herds of six or eight. Visibility was as usual only about four or five yards so that to be able to pick them out in the turbid water we had to go down at least half-way to distinguish them from the dark masses of rock. We lurked behind the rocks, lying in wait. When the little herd arrived, looking like an underwater rainbow, swaying slowly to and fro, the difficulty began. The fish had no intention of letting us get near them and all our underwater art did not avail us. Pretty well fed up and out of breath we rose to the surface and held council: 'You go that way, I'll go this, and we'll converge in the centre, and don't shoot me in the face . . .'

Just at that point a great bawling reached our ears. We

looked towards our companions, little heads in the middle of the sea, but were unable to hear what they said, although it was clear that something must have happened. They looked as if they were fighting. Soon they all dived under and we saw them no more. Mohammed and Priscilla beckoned feverishly from the boat; at last we realized that they wanted help. We raced the fifty yards towards them. At this moment the others rose excitedly to the surface.

‘Did you see it?’

‘Did you see it?’

‘Did you see it?’

‘But what, for heaven’s sake?’

‘A six-foot barracuda,’ exploded Folco. ‘Here, under us. I was uprooting a coral, lifted my face a second to look round, and found that muzzle pointing straight at me a yard away, immobile . . . Lord bless me, what teeth!’

‘Where’s it now?’

‘Dunno, somewhere below us.’

Gigi and I dived under, our guns pointed, our fingers on the triggers. The water, this cursed yellow water, was opaque. I arrived on the bottom but there was no sign of Gigi. I cruised obliquely down along the gradually descending slope, flew over one or two corals and found myself on a grey strip of old madrepore, with no living thing to be seen in any direction. I kept revolving swiftly for I had no desire to find myself face to face with a six-foot barracuda in this. *Zing!* That was Gigi firing. He must be found, he might need help. I searched all over the place, wildly, but in the semi-dark the whole thing was absurd. I shot to the surface like a rocket, and there he was, half a dozen yards away, with a queer looking object hanging in front of his nose. Then I realized what it was. His gun had lost its front barrel and the spring was hanging in the water like a black worm.

His only reaction to my surprised inquiry was a profound curse. Gigi, usually so controlled, must have been badly put out. He explained later. At a certain moment he had seen the huge thing coming towards him like a striped torpedo but with extreme caution; slowly, in half-depth, their eyes had met. Gigi stood still, looking into the scornful, cannibal-like face. The barracuda hesitated, then turned slightly and passed in front of him though out of range. Gigi moved and followed it softly. Again the barracuda turned in a half circle, still slowly, still cautiously, and looked at him; and again Gigi stopped. The barracuda dropped its mouth a little, unsheathing its great conical teeth, then repeated the manoeuvre as before, passing full-sided in front of him, only now at a distance of a yard and a half. Gigi's arrow flew into its side like lightning. For a fraction of a second Gigi stood tense, then the barracuda gave one whisk of its tail and was gone. Under the violence of the jerk, the cord that connected the arrow to the anterior part of the gun had torn off the barrel, and the barracuda had vanished with a three-foot long 11 mm. steel arrow in its side, and the cord and barrel as well.

'And didn't it turn round and try to bite?'

'I'm telling you, it left like a rocket . . . a V.2.'

'How long was it? Really six feet?'

'Every bit of it; it was longer than me.'

'And you all saw it, all three of you?'

Yes, all three had seen it (except me, damn it), near at hand, in extremely turbid water, while unarmed. It could have done what it liked with them. Evidently much that has been written about barracudas needs modification.

In all, we caught about twenty barracudas in the Red Sea, the four biggest, measuring between four and five feet, being caught by speargun. None of them ever fought back,

or put us in serious danger. All they did was to put up the natural and automatic defence which every fish puts up on capture. On the other hand, it is certain that if a frogman through bad luck or lack of foresight should trip into those huge teeth while recovering the animal, he could not help but have very unpleasant memories of the encounter. But this could equally well happen with any large-sized grouper or bream. It would be difficult to say how many barracudas we encountered in every circumstance (armed, unarmed, or while photographing) and in every habitat (algae, sand and coral from two to sixty feet deep), but there were certainly several hundreds of them, without counting an entire shoal of two or three hundred, in the middle of which Cecco once finished up by mistake while lying in wait for a platoon of dolphins in deep sea. An identical experience came Priscilla's way near Kosseir on the return trip. Not one of them ever attacked us, not one of them even gave us a serious fright as the sharks did. It may therefore be said that the barracuda (at least the Red Sea one), terrible as it looks, is normally inoffensive to man.

That evening, while we were still discussing Gigi's barracuda, the beast had the audacity to reappear. A black boy came to the quay where the *Formica* lay and told us that an hour before a native fisherman had found a monstrous pike afloat belly upwards in the middle of the bay, and into it was stuck one of those strange long things of ours. We gave him no time to finish. Cecco and I dashed to the native fish market accompanied by an eager compatriot. But it was already dark, and for all our asking and searching and reassuring them that we didn't want the flesh but only the head and the 'odd, iron thing', we met only a disagreeable and sinister silence. Nobody knew about it, nobody had seen it. A fish like that would have kept that poor Massawan

fisherman for a week, and he had doubtless decided to take no chances and keep his catch to himself.

At Massawa the story of the big pike (the Eritreans reject the pirate name of barracuda) went around for days and weeks afterwards; we were even told that someone found a fillet of it on his plate in a restaurant. But for us, and above all Gigi, nothing remained but a tempestuous memory and one speargun the less.

*

We got to know almost all there was to know about Sheikh Said, but the thing that remained most fixed in our memories was its mangrove forest.

Sheik Said is made of sand and madreporic rocks. To the south a vast beach gets covered, and then abandoned to the sun, by the tide; the coast is bare of trees, a short slope from the beach leading only to thorny scrub and a few tough grasses. On the north, east and west, however, Sheikh Said rises from the sea clad in green mangroves that look like giant white-trunked bushes. Here too the sea comes up from a long way off, advancing over the vast stretch of sand and few dwarfed madrepores at high tide. This expanse of water becomes almost a lake, still and blue between the island and the barrier which lies four to five hundred yards further out to sea, marked by the breaking surf.

At low tide the mangroves rise from the yellowish mud which is overrun with crabs and hermit-crabs and patterned with the soft triangular imprint of herons' claws. The tide rises rapidly, drinking up a yard of sand every ten seconds. Advancing with its rolling coronet of foam, the warm shallow water mercilessly swallows the crabs and their holes, wipes out the heron marks, and lifts flocks of oyster-catchers into flight. There is something inevitable in the rising of the tide

which is strangely disquieting. No force can stop it, no creature can escape it, its appointment with the stars is unalterable. I often stood alone on the island's edge watching the tide come in. The hermit-crabs would hurriedly coil into their shell homes, and the crabs dart for their holes. The oyster-catchers, crab-plovers and herons would ruffle their feathers in agitation, while the few who had already taken flight screamed hoarsely in the sky. As I watched the tide advance I was aware of an intense emotion, a desire to flee too, to run back and escape the oncoming water that was engulfing the world around me. I resisted almost with horror till the hot foam touched me, gripped my feet, passed me and drank me in. That first lick of foam was almost alarming. I felt I was an unimportant bit of nature and was humbled, yet at the same time happy.

At midday the forest of Sheikh Said was flooded. The water rose to a couple of feet, and while the kites and vultures settled on their enormous briar nests in the mangroves, the stingrays hid flattened among the roots. The temperature of the water was 98° F and the atmosphere 104° F in the shade.

We carried out several explorations in the forest, leaving the boat anchored to the first tree we came to and proceeding through the thick mud on foot, sinking up to our calves. We had been warned that there were quick-sands here, but this must have been pure imagination; one sank in, yes, but no deeper than eighteen inches, and under this lay a firm footing. It was hopeless walking in shoes, as they stuck at each step and usually came off; but it was equally hopeless to walk without them as the ground erupted with short sharp reeds that made it like a fakir's bed. However, looking into that dense verdure through which could be seen neither sky nor sea, curiosity so got the better of us that we would have endured anything to penetrate it. Although we were



2. *The Formica ran into one squall after another as she crossed the Mediterranean. It tested the ship's structure as well as the nerves of those on board!*

3. *The authors: Roghi, at left, and Baschieri. Behind is the third author—the Red Sea.*



4. *The members of the 'scientific nucleus': left to right, Stuart Tovini, Baschieri, Priscilla Hastings, Roghi.*





5. *The Captain of the expedition, Bruno Vailati, with an adult black-fin shark (Carcharinus melanopterus). The point where it was shot, underwater, can be seen plainly, between the eye and the first gill opening.*

6. *Quilici and Ravelli, prospecting round the wreck of the Urania which is lying in Ghubbet Mus Nefit, get a shock on seeing me, coming suddenly out of her hulk: they had no idea I was there and imagine I am some undesirable tropical fish.*





7. At high tide Sheikh Said's mangrove forest can be entered by boat, although finding a passage is not easy.

8. Sitting in the hot water of a 'forest tunnel', Priscilla photographs a vulture's nest and fully enjoys her moment of comfort. In this zone there were said to be shifting sands.



wearing as little as possible, in that damp sweltering heat with our legs immersed in boiling water and mud, and our trunks exposed to the heavy static air, the sweat poured off us like a waterfall.

Gigi and I were the first to venture inside. The day before, near the island, I had shot a big male pelican with the rifle at a range of seventy yards. This was the first specimen for our collection of Massawan and insular avifauna and we wanted to see if the pelicans nested among the mangroves. My shot had given rise to a strange scene; as the stricken bird sank soundlessly on to the water his two companions, instead of flying away, swam around ruffled and worried waiting for him to rise and fly off too. Priscilla and Cecco, recovering the victim, got to within a few yards of them. At last unable to wait any longer they rose with a whirr of wings and circled over him, ten, twenty times, in silence. None of us managed to rejoice in that first trophy, and even now when I look at the film I shot with those two flying round and round on the watery horizon, I feel full of self-reproach.

Had the pelicans got their nests in the mangroves then? In we went to see. There was one pelican cruising calmly between the twisted white trunks and the tall roots; like Lohengrin's swan it threaded its way under the arches of wood, driving the leaves before its white breast. This time I didn't shoot. We continued our search, but finding nothing turned to look up at the kites' nests. In that moment of abstraction we narrowly missed treading on a blue-spotted tan-coloured stingray (the commonest sort in the Red Sea) that lay crouched in the mud. Big as a car wheel, it shot through our legs. It was a miracle that we were not thrown headlong into the slime, and how we missed the switch of that tail I still don't know. Having had our lesson ('Don't

forget that we are in Africa', Cecco used to say censoriously every now and again) we advanced more cautiously and discovered that at high tide the stingrays were greatly at home in the forest, and that they were always the same species as the ones mentioned above.

On one of our subsequent excursions into the mangroves (it was on the first of February) we decided to go and visit the vultures' nest and on the way collect kites' eggs. In the numerous kites' nests on the more solid cross-branches we found about a dozen eggs altogether, two or three in each nest. We took away four in all and proceeded towards the large mangrove already marked as bearing the nest of the hooded vultures. This mangrove had reached the sky by forcing apart those nearest it and it grew out of the water as twisted as if a python were trapped in its trunk. Twenty-four feet above, it formed a platform of branches and leaves, and on this platform, a yard or more in diameter, was planted the nest.

Cecco, Priscilla, Gigi and I approached quietly. I had been allotted the unhappy task of shooting one of the parent birds. The others said I was the best shot, and when they were being extra nice, or horribly sarcastic, they would call me 'Buffalo Bill's father', 'Buffalo Bill's brother', 'Buffalo Bill's grandson', or 'Buffalo Bill's bootblack' according to the success of the shot. I advanced with my Beretta rifle at the ready, peering through the leaves and sweating, sweating. After a bit I caught sight, at the top of the tree, of a monstrous blundering thing like a turkey. It was the vulture. It had a wing span of at least two yards. As calmly as I could I took aim, trying not to notice the sweat that trickled down my nose, tickling it maddeningly. . . . Bang! I heard something that sounded like 'Buffalo Bill's grandmother', then laughter. The vulture wagged his head far up in the sky.

We climbed the mangrove and in the nest found its one and only young, as big as a pullet. I photographed it twice and then mounted higher for a third shot looking down on it; before I could press the button, however, there was a shiver under me and the branch I was on cracked. Twenty-four feet above the swamp, I swung, the camera in my left hand and in my right my last branch of hope. I prayed to all the saints that this might not break too. Gigi, methodical as ever, saved me in the end by dragging me by the feet on to the trunk. I sighed, bathed in sweat anew.

With every care we lifted the young vulture from its nest. It made no attempt to defend itself. Both parent birds arrived on the scene of violation, screeching shrilly. We felt sorry for them but their offspring meant a live specimen for us and we could not allow ourselves to indulge in deeper sentiments.

The small vulture was christened Kil in homage to the great Rudyard. It thrived and followed the expedition as mascot.

CHAPTER 3

DISSEI, BROWN ISLAND

THE entrance to the channel of Abd-el-Cader is approached from inside the port of Massawa and it takes a quarter of an hour in a rowing-boat to reach it. Even so the sea sweeps into it, cutting it into a gorge and carrying in every sort of fish, including big sharks. The banks of the channel drop almost perpendicularly from the surrounding sandy terrace to a depth that varies from forty to fifty feet, and its floor is covered with madreporic vegetation.

We were conducted there by a fellow-countryman, an expert on the zone. The water was filthy (visibility down to two or three yards), and put off by the yellow filth I did not go in; only Cecco and Gigi braved it. They saw neither interesting animals nor sharks, though I believe that if a whale had passed them two paces away they would have continued to sit imperturbably on the bottom scrutinizing the mud, convinced they were in an underwater wilderness. Gigi caught a large eagle ray (about twenty pounds) before finishing his short bathe, and that was the only living thing he encountered.

The east coast of the peninsula, that is the one looking out to the open sea, has no coral reef. It descends gently in sand dotted with large and small blocks of coral that never succeed in forming a chain or bank. Along the shore threads

a kind of herbal dyke, flowering sargassus-weeds that spring from the rocks beneath forming an underwater wall, while on the surface they lie like the streaming green-brown hair of a mermaid. So dense is this barrier of vegetation that it is often impossible to cross it in a boat. Strangely enough for the Red Sea, it is a very poor zone for fish and we did not catch a thing, although Gigi and Cecco ran over it all. At one point Gigi saw a black-fin shark hovering at Cecco's heels, nosing his feet; he in his turn shadowed it, but it became aware of him, took a vertiginous plunge, and was not seen again. Cecco had not realized that anything odd was going on. Gigi also assisted at a curious scene in which a four-foot barracuda was dashing after a turtle of at least a hundredweight. Gigi launched himself into a hunt for one or the other but both, still racing, disappeared into open sea.

Our last Massawan immersion was at Ras Dogon, and it was a spectacular one. Here, too, was no reef worth speaking of, only an uninterrupted chain of madreporic blocks a dozen yards wide, that at a depth of fifteen to twenty feet formed a distinct line of demarcation between the shallows of the littoral and the sands of the deep. The quantity of fauna on this odd sort of reef was something unimaginable; only at Cundabilu and once at Dur Ghella did we see anything like it. The water was still dirty, but the bottom could often not be seen, not because of the veil of plankton (the lower Red Sea would in fact be quite limpid if it were not for the plankton which, with its millions of microscopic organisms in suspension, almost entirely absorbs the rays of the sun) but for the multitude of fish. Fishes of not more than two pounds, but hundreds of thousands of them in throngs, shoals, banks; we seemed to be swimming not in water but in fish. They were mostly the very common yellow diagrams or gaterin-fish, coralline fish, small groupers, dozens of kinds

of parrot-fish, demoiselle-fish, trigger-fish, butterfly-fish, surgeon-fish, all in a heap suspended in half-water, ogling from their coral dens, weaving up and down on the bottom, rubbing up against each other. It was enough to make one shout with wonder.

A discussion we had had on the frequent phenomenon of mimetism and natural camouflage came to my mind. The tiger mimics the bamboo, the lion the yellow African bush, the python the trees. They merge with their background, it is said, so that their prey may less easily escape. On the other hand, the prey has its own camouflage; the hare is fawn-coloured in the stubble, the gazelle sandy-coloured in the desert, the partridge white in the snow. Likewise in the Mediterranean and in the other seas relatively poor in fauna, the fish—soles, rays, octopuses, groupers, to quote a few of the more classical examples—are mimetized to the type of sea-bed they live on.

In tropical seas, however, every kind of fish seems bent on outdoing the other in brightness of colour and general eccentricity of appearance. It would be impossible to imagine a more consistent, obvious and flagrant anti-mimetism. Exhibitionism is the keynote of the tropical sea-bed. How is this to be explained?

The most probable explanation is that the coralline habitat is so opulently benevolent to life that it can offer each creature plentiful opportunities for escape or aggression, and therefore survival. In the tropical marine habitat, innumerable as its creatures are, only an infinitesimal proportion of them are sacrificed to the struggle for existence, while in our seas, although not all the creatures born in them are blessed with the possibility of mimetism, it is those that have this advantage that have survived over millions of years. To sum up, in tropical seas, for reasons of climate and therefore

habitat, there are the conditions of life for all. In non-tropical seas life is possible only for the cautious and the protected.

At Ras Dogon we caught few fish for the sole reason that there were altogether too many fish. I remember that I stopped fifteen feet down, gun in hand, finger on trigger, unable to decide whether it was to be that diagram or that red bream . . . no wait, there's a pampano; blast, a demoiselle fish has got between me and a barracuda, there it is, no it's another; now I shall shoot the next fish that comes my way . . . then four turn up simultaneously. . . . When I came to the surface I felt quite drunk and was glad to rest my eyes on the even coastline of the desert where there was peace and solitude.

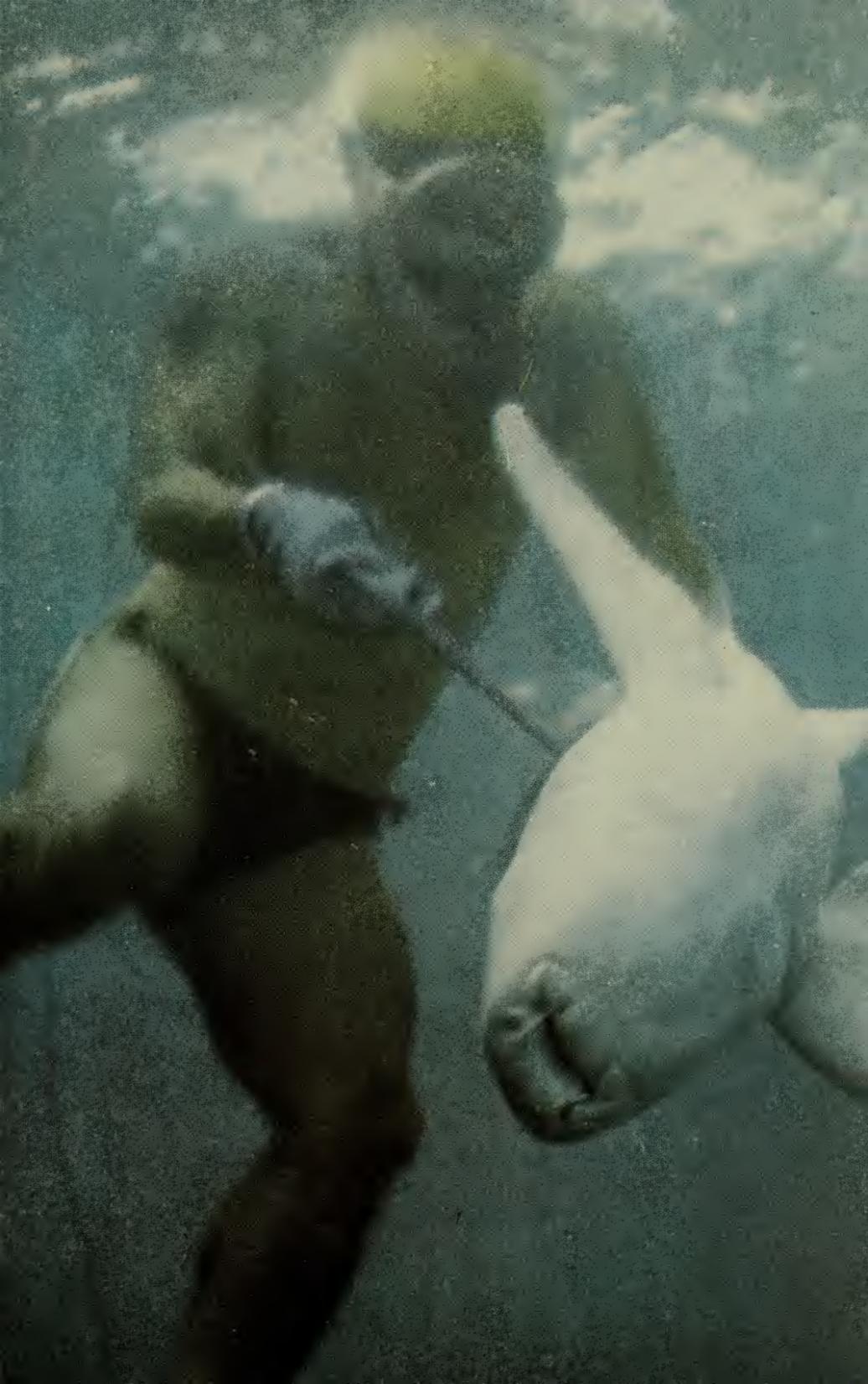
That day I followed a handsome turtle in vain, observed with Gigi a small curiously striped shark, and to defend my good name caught—by chance—the biggest fish of the day, a ten-pound pampano. But then from Cecco came categorical orders reminding us of our duty to the formalin pot. We slaved to fill the boat and it was soon done, with new kinds of parrot-fish (new to us that is), greyskins and coralline fish. In the heap a glorious porcupine fish turned up, puffed out like a spiny Easter egg.

Before leaving Ras Dogon we decided to search for molluscs on the beach at low tide. We got out of the boat and pushed it a hundred yards or so on to the dry, walking claw-footed on the prickly madreporic sand. This was an exhausting manoeuvre although we were used to it by now. Then, under a sun of 122° F or more we began collecting shells. Numerous and beautiful were the cowries, like Danish porcelain. As already confessed the cowries were and are my one weakness, but it so happened that if I found two, Cecco found four; if I with a shout of joy found a new species,

Cecco soon after with a malicious grin showed me three new species. I cursed him vigorously and thoroughly until a well-timed shout from Gigi interrupted me. 'Sharks!' Two of them, each about four feet long, were floundering in four span of water a hundred yards away from us. We dashed to the boat hopping between the corals, slipped our underwater equipment on, grabbed our guns and were off, Gigi staying to unhitch the boat. We got to within ten yards of them and were about to give battle when they both began thrashing the water with their tails. They then took to the deep followed by our curses. We circled the entire algae forest (the usual vegetable barrier before the shore) in search of them and then advanced into the deep but there was not a sign of even a fin.

On our return to port we ran into an *uri* (a kind of long primitive canoe) full of native divers. They were working on the remains of a small sunken ship. Standing in the midst of them, looking distinctly gorilla-like, was the immense bulk of the biggest black giant I have ever seen. At that moment only one of them was diving, helped by a large stone that dragged him to the bottom, fifty feet down. He made his return by clambering up the cord tied from the stone to the *uri*. I timed his two longest breathholds: seventy and seventy-five seconds. Other black workers, fifty yards away, set off a mine; dead fish rose to the surface and a large shark came up and seized them, followed by another and another.

PLATE 9. (opposite) The nurse-shark has a very small mouth, as can be seen, out of all proportion to its body, and is thus quite harmless. The moustaches on its upper lip are used to remove the sand gently from the sea bed, to bring to light the smaller shells and crustaceous animals on which the fish feeds. The red mullet also works like this.



We looked at the diver. He remained in the water unperturbed, hanging on to the boat to take breath. Were they not afraid of sharks, we asked Mohammed. 'Afraid yes,' he replied, 'but it is Allah's will if we are called away. It is an honour for us.'

Unlike many of the local pearl-fishermen, these divers and all those working on wrecks around Massawa, did not use nose-grips.

*

Long, steep, savage, lovely among the hideous, Dissei is the island I remember with most affection and nostalgia. Dissei was generous and welcoming, even with those rugged red and brown mountains of hers. Hers was a desolation not of desert but of Tuscan hills standing disinherited in the middle of Africa. Dissei is a soft-sounding name that knows of courtesy and limpid things. Limpid was her sea, and courteous her world. She let herself be discovered without reserve.

We were able to head for Dissei after the Negus, the Emperor Hailé Selassi, visiting Eritrea, had inspected the port of Massawa and become aware of us. The first sign of imperial benevolence was when consent was given that two of us might film him from a few steps away as he went aboard a United States corvette at anchorage. The second act of benevolence was the visit of H.E. the Viceroy of Eritrea, Andergacciou Messai, aboard the *Formica*. He suddenly arrived on the quayside, without warning, followed by his entire retinue, causing great consternation on board. We were all lounging about, some of us in our bunks snoring our heads off. Waking the sleepers was the most difficult part of our hurried preparations. When we bellowed at them . . . 'the Viceroy's coming', the only answers we got at

first were 'Don't be a fool' or 'Do you think that's funny?' or even a well-aimed blow.

However, we got organized and within a few minutes His Excellency was able to look over our complete store of underwater equipment, specimens of embalmed fish, madrepores, shells and the collections of fauna in formalin. Gregory, the domestic seagull, also came under inspection. The Viceroy expressed admiration for what he saw and asked many searching questions in good French, which Vailati, exemplary leader of the expedition, answered from behind the luminous smile of his moustaches. It was a happy encounter; a trip together was arranged and we promised at the Viceroy's special request to furnish the small museum in his official residence with marine biological material. Our subsequent gift to Massawa (of stuffed porcupine-fish, box-fish, pug-fish and madrepores and echinoderms, etc.) was greatly appreciated, and we were later invited to a cocktail party at the Italian Consulate at Asmara, and to an intimate luncheon at the Viceroy's palace when His Excellency and his Princess Consort graciously received us. They told us that this was the first time Italians had been so received since the unhappy events of the war.

From that moment all the silent barriers were down and we were left to carry out our work in peace. We could go to and from the islands without impediment and the only formality that remained was that of keeping two Eritrean police on board. However, we knew that they loved coming aboard and that at the garrison there was much rivalry for this particular duty. As soon as we were out of port the two policemen would tear off their uniforms and spontaneously place themselves at our disposal. Sometimes, to their intense pleasure, they came fishing or shooting in the interior of the islands. They were thoroughly decent chaps and spoke fluent

Italian. One of the older ones had been one of our old *bulkbash*. He knew Rome and told us of his battles under the Italian flag.

We left for Dissei on 7th February, entrusted to the care of an austere but charming bearded Dankalian, Sayéd Alawi Saleh, *narcuda*, that is to say licensed 'pilot'. Sayéd became our inseparable Charon and guided us with sure hands through the most tortuous mazes of the madreporic archipelago.

We left port at 6.30 on a glorious morning and at 9.30 had already entered the island's biggest bay. On its shore sprouted an attempt at a village, twenty huts apparently uninhabited. The water was blue and the island rose high, her backbone undulating with ancient volcanic cones.

*

The engine hummed. We were near to discovering our first tropical island never explored by frogmen and probably so far never studied seriously by man. The little row-boat galloped blithely over the reef of brown-red coral. Cecco let out his line, Priscilla stared at the dead volcanoes while I reloaded the rifle, for my eyes had alighted on the immense madreporic reefs to the north where flocks of hundreds of birds were afloat, white as the foam. The second of the three dinghies, carrying the Buchers, Silverio Zecca and Alberto Grazioli, cut away in our direction too. The plan was that they should stop just beyond while we should get to know the zone furthest north and turn the point if necessary.

The coast was steep and deserted, softened only at the base by a very short tongue of sand. Under the sea this sand opened out and joined the barrier a hundred yards further out.

After a bit we saw something move between the rocks on the beach of a small cove, like two large animals spying on us. Gigi gave a tug at the tiller and we drew in to the coast. Like lightning two nude natives sprang from their hiding place and fled towards the agaves where they disappeared in a trice. Although it was all over in a second, we were a bit put out. Could we be such a terrifying sight?

The sun blazed down on us. The sea was brilliant, the birds innumerable. High up on the last crest of the island's point a dromedary's profile was drawn on the sky. Suddenly the line stuck violently.

'Gigi, stop, turn round, we've caught a rock.'

Cecco tried hard to recover the line, but it was no good, it was hooked in a block of coral. With the engine just ticking over we arrived above the spot where the line lay prisoner. Cecco pulled gently with all the art of his native school of Porto Santo Stefano.

'No, it's no good. There's something else here.'

After much struggling we pulled into the boat a . . . twenty-pound grouper.

Only a fisherman can really appreciate the significance of this. To say you had caught a grouper (a rock fish, sometimes called rock-cod) by line would make you a laughing-stock for life in Italy. In the Mediterranean the capture of a grouper in this way would be like lassoing a hare or ferreting for a partridge. To go even further I will say that out of ten fish caught by line eight were groupers. This means that the medium-sized grouper in the Red Sea is not exclusively a rock-fish (in fact we often saw them navigating the coast like tunny and bream). They are, however, of a frightening voracity and the more corpulent ones, those of a hundred-weight upwards, are dreaded by the pearl-divers almost more than the sharks. Our catch excited us. We had not expected

such a thing at Dissei, or even in the Red Sea for that matter.

A couple of spectacular Goliath herons were parading along the coral reef further up. It was impossible to get near them in the boat. I got out and soon shouts of 'Buffalo Bill's father' rang from the boat. I had shot the six-foot male and a reef-heron sitting on the water further away, both stone dead. Other birds we collected that day were seven sea-birds of varying species and an osprey. Just beyond the reef on the last rock summit two imposing birds of prey watched us suspiciously from their nest. When later we found they had flown we climbed up. In the nest there were three large speckled eggs as well as bits of fish, bits of reef-heron and the four hoofs of a dick-dick; this must have been killed on the mainland and carried here from a dozen miles away.

Not finding the north-east of the island a very suitable zone for underwater work we thought of immersing on the opposite side where a sudden and intense blue showed beyond the vast yellow reef. This was just what we wanted. It meant that the barrier descended sharply, almost perpendicularly. This was what we were looking for and what we found.

But a problem presented itself. How were we to get over the reef without doing an interminable detour to the north? The only answer was to get out and pull and push the boat over. The usual infernal chore.

While marching at full throttle against the sand bar in a foot and a half of water there suddenly appeared under the bows first three, then four, then five black-fin sharks each three feet long. Disturbed by our excessive noise they waggled away disconcerted. 'Lord', we said, 'if sharks hang around here in a "palmful of water", like mullet, we shall be in for some fun out there in the blue.' Cecco loaded his

twelve-bore and shot at them furiously, determined to get one at all costs. He did not of course succeed.

After this foretaste we arrived on the deep sea-bed, having heaved and tugged the boat over the blinding sandy hell of that bar. Drunk with sun and heat we were already worn out. One of the men had to stay and row. This thankless task fell to me.

Cecco and Gigi got ready. The boat was motionless on the level sea that hurt the eyes with its blueness. On this side, the terrace jutted twenty to thirty yards from the coast, then the wall of coral undergrowth dropped on to the invisible sea-bed. The water was fairly limpid, vertical visibility being about eight yards, horizontal visibility twelve yards.

'Hey there, look at those fins, *those* fins!' I jumped to my feet pointing a shaking finger. Forty yards from us, the thin clear fins of Sheikh Said. I rowed four angry strokes. Cecco gripped the gun. Five or six fins zig-zagged leisurely on the surface. Cecco fired straight into their midst but they didn't so much as budge. I dropped the oars and fired with the rifle. This time one of the mysterious animals seemed wounded. It tossed and dived, its fin appearing and disappearing on the surface. Cecco and Gigi hurled themselves into the sea but it was gone, unseen. They had still not had even a glimpse of it.

The heat, the sweat, the sluggishness, the bad temper, oh! those wretched fish. . . .

I held the dinghy thirty yards distant from the others. I could guess what was happening by their movements. If they continually immersed in one spot, slowly, without hurrying, it meant there was a grouper. If they started swimming determinedly with a halt from time to time, it was pretty certainly a barracuda; the halts were a way of

deceiving him. The curiosity of the barracuda knows no bounds and he circles and comes back to have a look. Then the fun begins. Cecco produced an eight-pound grouper, then a twelve-pounder. Gigi a magnificent ten-pound red bream followed by a corpulent parrot-fish. There could be nothing more riotously colourful than these fish as they were thrown aboard, like pieces of rainbow become fish.

A shout . . . I leapt round and saw Gigi, now further off, on the very edge of the barrier where the blue sinks. He appeared to be shaking off . . . shaking off, with blows, an invisible enemy. I rowed like the devil, yelling to Priscilla to reload a gun and dig under the heap of fish for a pair of fins and a knife. Gigi was still there, hitting and smiting and slapping the water like a madman. By the way he was rotating and keeping his eyes glued below him, it was obvious that there was some animal that was being a menace. We got to him at last.

‘Shall I jump in?’ I shouted.

‘No, it’s too late . . . it’s gone.’

‘What was it?’

‘A black-fin.’

‘Big?’

‘Not five feet.’

‘What happened?’

‘I was worming under a coral trying to tug out an odd-looking parrot-fish. Hearing something I turned, and found that thing a yard away, believe it or not.’

‘And then?’

‘Nothing. I came up with the parrot-fish and it buzzed under my feet trying to pinch it. I tossed and shouted under water but evidently it was deaf.’

‘Did it eat the parrot-fish?’

Gigi smiled.

'No, that got away too and now I can't find it, damn it. I don't mind telling you I was jolly frightened. That thief passed my toes like greased lightning.'

'So the theory of shouting against sharks . . . ?'

'When I see the good Hass he can have a piece of my mind.'

Gigi crawled into the boat. He had had enough for that day. Now it was my turn to go in.

'Shark, are you or are you not still there?' All was blue, a wonderful intense blue, translucent as the skies of the Renaissance painters. The coral wall fell almost vertically from the shelf, one vast spiny bush, a prickly-pear of azure madreporae. The round, grey, wrinkled corals that looked like large human brains formed a balcony on the void, while underneath extended myriads of still stranger ones shaped like packs of cards, fans, stag and elk horns. Amidst their numerous ramifications lived a dense population of tiny fish, crabs, and minute animals that were a mixture of painted worms, violet beetles and odd sorts of crickets. A look into any small crack revealed a fabulous swarming life, infinite in its morphological variety.

Who could remember sharks in such a paradise? I wandered about, searching, fascinated. I had read much about tropical seas but the reality far surpassed my wildest imaginings. I took a deep breath and sank along the coral wall towards the sea bed. The deeper I got the more the colours faded; gradually the reds and oranges disappeared until only a pale yellow remained in a world of sapphire and emerald, a world where the plants were of rock and the rocks were alive. I was in a castle where all was gold, and the air though translucent was tinted blue and green. At the base of the great wall, thirty-six feet down where the sand sea-bed descended rapidly towards the abyss, gloomy

with the shadows of huge rock masses, there lived the flowering sea-anemones and 'attine'. With their fringe of tentacles they were like peach buds glued into coral cracks. I touched them. They shut at once and dived back into their stalks in a flash.

I darted about the underwater world like a schoolboy perpetrating practical jokes. I turned the star-fish upside-down so that I could see them turn themselves back again, first stiffly then more elastically, raising themselves up on two of their points like ballet-dancers. I knocked on the 'bivalve' shells, which piqued them badly, and shook a coral whose community of tiny fish, instead of abandoning ship, clung to her even more tightly. Then I poked a crab as red and as big as a big red fist. He was just as peeved as the 'bivalves' and rose up defiantly on his hind claws, waving his pincers fearfully and looking daggers at me. He was certainly no coward. Not only did he refuse to escape, but he was presumptuous enough to want to put up a fight and show me how he could defend himself. All right then. I pointed the harpoon at him. His tweezers gripped its end and there he stayed, his claws ready for action. Clinging tighter and tighter he nipped and pinched, trying to reduce it to pulp. I stretched out a hand and grabbed him by his backside. 'Take your freedom, little fellow. You forget I'm a man and therefore much more astute than you, though with far and away less guts.'

My last experience of the day was with a black-fin shark. It was not more than four feet long but its body was beautiful and tapering, its smooth pearl-grey broken only by a black line along the stomach. It passed in front of me on the terrace only five yards from the shore in six feet of water. It went by and came back again looking at me uncertainly. I found it difficult to get near and in the end shot in too

much of a hurry and pierced only the caudal peduncle. While it twisted angrily on itself two or three times, I tried to catch it by the tail. But with a sharp blow one of the flights of the harpoon tore off, the other slipped out and the black-fin was gone.

It was late when we returned. The tide had risen above the great sand bar so we could cruise over it, all aboard. The sea, chopped by a sudden south wind, was travelling with swollen curling waves. We met the others, who had been fishing on the east coast. Raimondo Bucher stood up and waved a shark at us. Killed by him with a decent shot straight through its spine, this shark was the first to be spear-gunned. A three-foot-long black-fin. It had given little trouble. Good for Raimondo. Our initiation was now complete.

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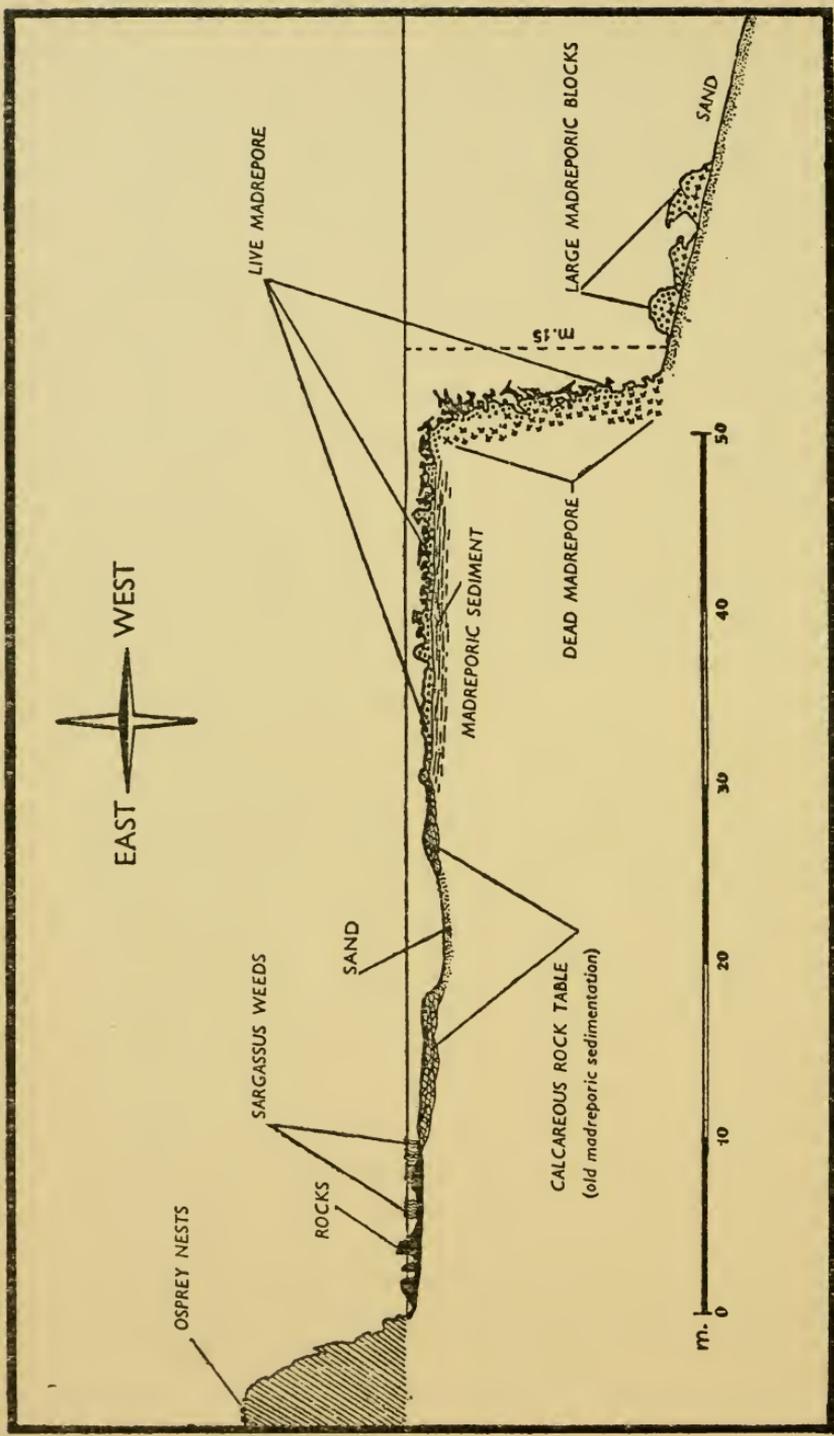
On the morrow Dissei was again our objective. At dusk we had re-entered Massawa. At dawn nine guests had come on board, the Italian Consul, Marchese Benedetto Capomazza, the British Consul-General and other Italians and British all wanting to spend a day at sea. Still early in the morning we dropped anchor on the north-west of the island. Our guests took an enthusiastic interest in our work and were at pains to tell us what pleasure the trip had given them notwithstanding the lack of comfort aboard and the fact that on the return trip a roughish sea got up which they had to cope with as best they could. Many were the stomachs that suffered that day.

Raimondo again made the biggest and best catch—a ray of at least eighty pounds. Silverio spied it lying on the bottom and called Alberto and Raimondo to help. Raimondo

went down on to the sixteen-foot sand-bed, aimed calmly at the immobile animal, fired, and waited for its reaction . . . but no reaction came. The beast was stone dead. It was, I believe, a rare specimen that we ran across only once again during our time in the Red Sea, when one was captured at Sciumma by Priscilla. It was high in the back, almost as high as a stingray, and coloured a bright yellow ochre with brown, grey and black spots. Its eyes protruded, cow-like, while its skin and tail appeared to be armed with minutely thin, very tough spikes.

Giorgio Ravelli caught the first big moray-eel, a twenty-pound one. As is well known, this huge serpent has a poisonous bite. It put up such a violent and strenuous fight that Giorgio confessed later that had he suspected the dimensions of what lay behind that head protruding from the corals, he would have left well alone. He pulled it out with consummate technique, however, notwithstanding the fact that he was a novice at the game of spear-gun fishing.

There are various kinds of morays in the Red Sea, the biggest and commonest being very similar to the Mediterranean one, although a rather deeper brown in colour and splashed with vague violet markings. Its proportions are remarkable. A twenty-pound moray is not a ten-pound one doubled. Its length is almost the same, but its girth is three times as great. A twenty-pound moray is rarely more than $5\frac{1}{2}$ feet in length, but it is as thick as a man's thigh, almost all muscle and no bone. Another characteristic of the tropical moray is its aggressiveness. It does not normally attack unless disturbed, but once disturbed it springs. Alberto shot one whose head was as usual only just showing out of its den. He had planted the arrow badly, just under the skin. Instead of drawing back, the moray rapidly seized the arrow and with one bite tore it from its neck. Then with mouth wide



Section of the sea bed West-North-West of the Island of Dissei

The kind of sea bed here depicted is, because of its morphological elements, the most varied of all the types encountered by the expedition. Between the rocks of volcanic origin and the flourishing barrier of live madreporae the sedimentation and stratification of the dead madreporae can be seen at various stages. The madreporic barrier is more developed towards the west. Beyond it, the sand bottom falls away rapidly: at 400 yards from the island there is a depth of 150-180 feet.

DIAGRAM BY G. ROGHI

open it turned upon its assailant. Alberto was quick enough to confront it with the unloaded gun and it let its steam off on this, leaving its tooth marks well imprinted on the aluminium barrel. Then it weaved itself into another crack and with head still out and eyes aflame it was ready, despite its wound, to launch a counter-attack. Alberto, however, had had enough, and decided to withdraw. These morays can weigh up to twenty-six or twenty-eight pounds.

A similar thing happened to Gigi, with an eighteen-pound moray which, bent on revenge, burst from its den thirty feet down, and pursued Gigi almost to the surface. Luckily the unloaded gun again took the full force of the animal's wrath. One day, Cecco was scraping away in a hole with his bare hand when the head of a moray suddenly darted forward from inside. He withdrew his hand just in time. If it had been bitten in this way by a twenty-pound moray he would most probably not have got it out again. Morays have teeth bent inwards like serpents', designed to grip the prey till it is torn to pieces. But he would not have had to wait to be torn to pieces; helpless in that iron grip he would soon have suffocated and drowned.

I, too, once found myself *tête-à-tête* with a moray. I was swimming unarmed at dusk in dim and dirty water looking for molluscs, when suddenly I came face to face with the beast not six feet down. Rather than upset the fellow I tried to slip away without being seen. But no, he got wind of me, and swivelled round, pointing himself at me, glaring unmercifully. He then blew out his neck like a cobra while those charming jaws opened and shut rhythmically. I wasn't too happy I must confess, all alone, with not even a knife on me, and the boat miles away. Suddenly I did an instinctive splash backwards, an act that in cold blood I would have probably not considered wise. It was enough to

frighten him for a second, a second that got me out of range of his lunge, and sent me to look for molluscs elsewhere.

But to return to our day at Dissei. We pointed the tiller towards the same part of the island we had visited the day before, heading slightly further south. The coast was still steep and the madreporic shelf wound in and out from the shore more or less following the coast line. The shelf never approached nearer than thirty yards and was never further than a hundred yards from the island.

Suddenly we saw those thin clear fins again! But however many were there? Dozens! In the shallow water they crossed and recrossed each other, then circled widely over the deep and returned. Now or never! Priscilla remained at the oars while we three dived into the blue. It was a solemn moment. We headed in battle order towards the coral reef hoping to cut off the mysterious herd from their escape into the deep. Gigi on the left, Cecco on the right, me in the middle with the gun adapted for 'big game'. A twenty-four-yard-long nylon cord had been attached to the arrow of this gun, at the end of it a float, one of the inner tubes from my car. The idea was this: the float would mark the whereabouts of a captured fish that was too big and strong to be held by a man, and that had already broken the short cord that joined the arrow to the gun. First and foremost, it would show the whereabouts of the fish, secondly it would tire the wounded animal quickly and prevent its vertical immersion—an important point this, as it completely eliminated the danger of losing interesting specimens, to say nothing of preventing their escape to a lingering death. It was a system that worked admirably until it failed. And with a manta of a hundredweight it did fail, miserably.

So in formation, our hearts thumping, we circled the herd, although we were still unable to see them. This time, by

heaven, they couldn't escape us! . . . And here they were! We stopped dead, amazed, silent, while before us passed the spectre fish in rank . . . fish never seen, never even imagined by us. They were not sharks. Long and silver, they were three to four feet in length, cigar-shaped and looking something like huge mullet. Their heads glistened like white lacquer, their tails were right out of proportion. Slightly stunned, we realized that those famous 'fins' were not dorsal fins at all, but the upper lobe of their tails. This then was why they had been so impossible to hit. We had imagined that we were aiming at their backbones, but in fact we were so wide of the mark that we were just making a hole in the water.

In this moment of enlightenment came also a frenzy to capture. We all had a go; we followed them, stopped quite still, ducked behind corals and then dived down and with our stomachs touching the sea floor, lay in wait. They remained unapproachable. What could these fish eat? They travelled just under the surface, their muzzles held aloft, almost sniffing. Following them, waiting for them, tricking them, all our tactics were equally useless; all they did was to take us for a ride either alone or in groups. After a while I noticed a few passing me at the side with uncanny speed. I shot, and missed. At the same moment I heard a muffled yell from Gigi:

'Got it!'

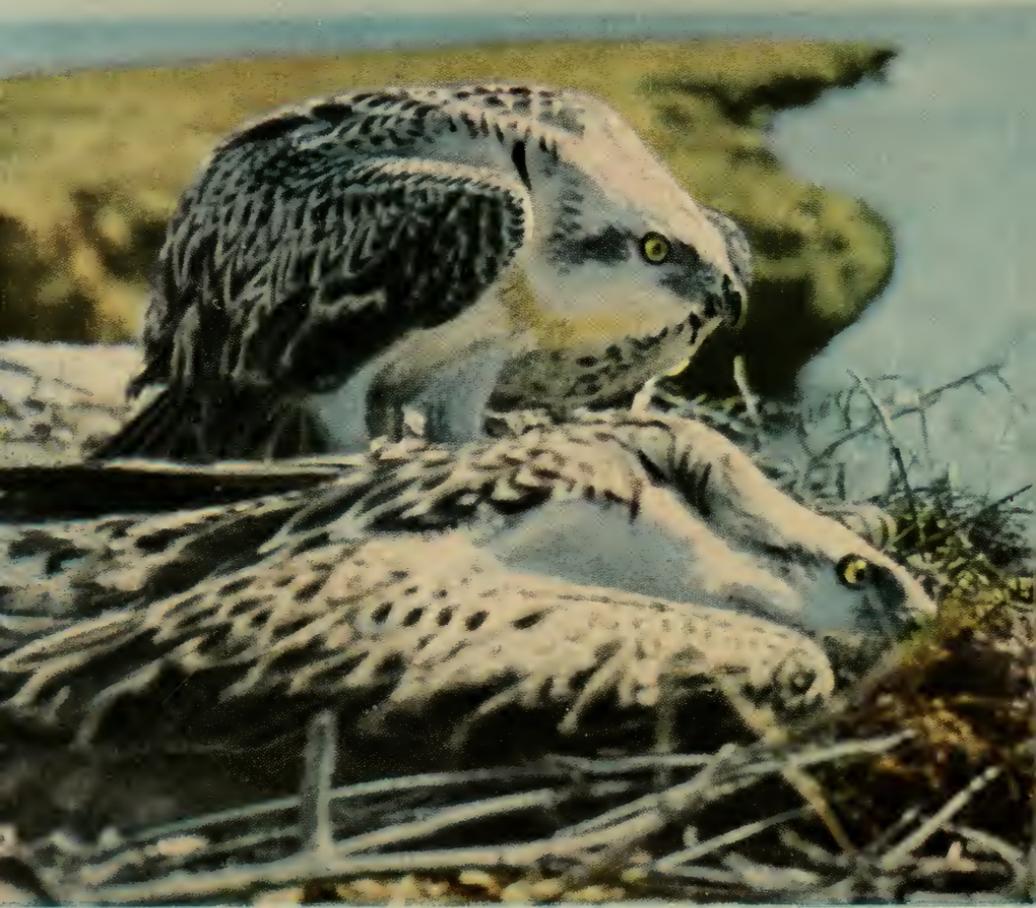
But excitement turned to disillusion. The mysterious fish, hit in the middle of its back, reacted with such incredible violence that it snapped the steel harpoon soldered to the steel arrow in two as if it had been a twig. Half an inch of steel torn clean off without pressure on anything more solid than water. And the fish had gone for good.

The water was clearer than on the day before, the sea bed

being visible at thirty feet. I swam down along the wall of the reef. There, between the giant blocks on the sand that sloped into the depths, a blackish form moved and turned. Cautiously I approached, eyeing to right and left for sharks, sliding over the sandy bottom, leaving the barrier at my back. Could it be? Yes, it was a grouper, one of eighty pounds at least. I withdrew silently, and rose gently without swimming. I called Cecco and we went down together in case one or other should need help. Thirty feet down. There she was. We approached slowly, and swam round her with guns at the ready. The great grouper gave a start, swivelled round and stared at us, fanning her chest with her agitated fins. But before we could gain shooting range she disappeared into the gloom. This was our first encounter with a large grouper in the Red Sea.

Then followed what I called my 'shark-kicking' experience. It began with the agitations of a handsome twelve-pound fish (a kind of reddish-brown bream) that I had shot in the bowels at the base of the reef on a depth of thirty feet. There was just time to count three between the shot and the appearance of a shark (the usual black-fin) coming upon the same fish with mouth wide open. It was a matter of a second. I was not put out, in fact I remember feeling a gust of bellicosity towards it, perhaps because I knew it was exclusively interested in the fish and not in me, perhaps because in exceptional conditions one's nervous reaction is frequently quite contrary to that which would be expected in more normal circumstances.

As it attacked, I snatched my prey away, pulling the cord violently. The shark missed its mark and circled ten yards further out. I was dumbfounded that I had been quicker than he had, but I realized that this was not the usual speed of an attacking shark. It evidently wanted to eat, but was



10. *Dur Ghella is the fatherland of the ospreys. They build their nests in the few dwarf trees along the shore: and in them we found the remains of fish, herons, and even gazelle.*

inhibited by my presence, a psychological fact in my favour which I fully exploited. Furthermore, I thought, as I paddled towards the surface, looking round to see if others had arrived, the black-fin would consider that I was as good as he was at catching fish, and it was therefore doubtful if he would venture to come between my feet.

The shark came back a second time. He did not try to gulp the prey in passing, but stopped three yards away and wagged his tail. Then he opened his mouth and with a bound tried to seize the bream. This time I found it easier to snatch it away from under his nose, although it was tossing ever more violently. Anxiously I watched the wound in its belly widening and the arrow slipping further and further out. It was losing blood copiously and the shark would certainly be feeling more excited. He had in fact given up circling widely and now remained permanently under my fins where he leapt repeatedly in short sharp darts towards the poor fish. It was no good pulling any more, although I continued to give swift tugs at the cord so as not to be taken by surprise while dragging myself towards the shore. I was already inside the barrier and felt the sea-floor rising . . . twelve feet . . . nine feet. The shark, I thought, would soon be finding himself at a loss in so little water. But here my luck was out. Without realizing it I had taken the wrong direction, and once again I found myself on a secondary shelf with a depth of eighteen to twenty feet.

The shark, who was probably not so much enraged from the checks he had received as from the abundance of blood around, suddenly became bolder and approached to within a yard of the bream and four yards from me. His whole outward appearance manifested a desire to finish the fish off. Swiftly I reasoned why his attitude had suddenly changed. I realized that the shark was no longer put off by

my presence, for the simple reason that until now I had been beating a retreat; I had not in fact reacted as any large plundering fish would normally have reacted after being disturbed for so long. Just then the wound of the bream tore open, the flights of the harpoon slipped out, and the corpse of the fish sank to rest on the bottom. Instinctively I took a breath of air and plunged down to recover it. The shark (without the deep breath of air) did the same. We found ourselves face to face at the base of that shelf with the bream immobile between us. The whole episode lasted less than ten minutes, and this final scene no more than a minute, but as is always the case under water, the time seemed four times as long.

The shark was three yards away now, pointing straight at me like a baton, but its muzzle was directed at the bream. Remaining almost incredibly still, in half-depth, it stared at me. My mind was working frantically, but one thought predominated: 'Don't let yourself be done down by a fish.' I looked him in the eyes and saw for the first time that these were yellow with black vertical pupils like cats' eyes. They were not so much fierce as furtive, almost vile, the eyes of a blackguard. The dead bream was still there, lying midway between us. Slowly, very slowly, I stretched out my left arm, advancing perhaps a yard, then I pounced and grasped it by the tail, simultaneously letting out a yell that rose to the surface like an explosive bubble. But my courage quickly evaporated. Half-way through my bold act I was seized by a sudden violent panic. What was happening? Water entered my mask and half filled it. I kicked like a madman in my struggle to withdraw on to the reef. With the first kick I saw the shark do a sharp three-quarter twist. Its body or its nose had had a thwack from one of my fins. In that second I was convinced that its teeth were on me.

Completely beside myself I rose to the surface reeling, more dead than alive. Somehow the tail of the bream was still in my hand. While still rising, exhausted and feeling like a cat at sea, I saw the tail of the shark disappear like a flash into the blue. Of the two of us, he in the end had had the worst fright.

In the meantime the boat had drawn closer. My companions, who were all aboard, looked at me stupefied. What the devil had I been doing? I told them in two words, handed them the bream, climbed on board, and said not another word. I was in a rather emotional state and knew that if I tried to tell them straight away about what had happened, I would not be able to do much more than stutter. It was only then that I began to realize that I had lived through a quarter of an hour that was slightly out of the ordinary.

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Dissei, strange and beautiful island . . . I wrote in my diary ' . . . We've been fishing the whole time on the eastern barrier. Gigi found a five-foot black-fin on the sea bed. He approached and shot at it, crossing it on the barrier's edge. The shark went mad, got entangled in the corals and split the cord.' The events recorded in these few lines were for Gigi an entire drama, the conclusion of which made him all but weep. I can remember his face and how he told the story back in the boat. How clever he had been to get it to follow him on to the shelf into the shallow water! And the masterly way in which he had put it off its guard, cornered it and plunged the steel arrow into its side . . . and then, alas, the shark had begun its saraband. It had thrashed a hundred corals to pieces with its rail, become embroiled in them with the nylon cord, broken this too and spun away to die as food

to its brethren. Poor Gigi held his clenched fists heavenwards and swore that never again would he hold a gun in his hands in the Red Sea.

And Dissei, how can we forget your guinea-fowls? One morning we touched land at a small beach. It was surrounded by rocks, prickly-pears and agaves, while inland there were glades of dwarf acacias. I crossed the beach, took a couple of steps into the glade which opened before me, and there, between the grey-green sparsely growing trees I saw a flock of about twenty large birds, looking like nothing less than a bevy of farm-yard hens scratching away under the hill. I ran to the boat and after a minute we were out on the shoot. The guinea-fowls, which were as fat as turkeys, began running and flying round the hill. While I hemmed them in below, Cecco, Gigi and Priscilla followed them. They had forgotten the asps and the vipers about which the Massawans had been so careful to warn us, and were wearing only sandals on their feet as they scrambled over the loose rocks. The whole mountain rang with shots. When they eventually returned, worn out, soaked with sweat, their legs bleeding from the scratches of thorns and cactus prickles and all of them on the point of sunstroke, they were holding five succulent guinea-fowl in their hands. An undreamt-of meal, a meal for all, including the dogs.

And finally there was that last walk under the sea at Dissei when the water was clearer than ever before. Horizontal visibility was at least forty yards, and vertical visibility between twenty-five and thirty. I had neither speargun, nor camera, nor knife with me, only the breathing apparatus slung on my shoulders like a haversack. Alone and untrammelled I wandered where my fancy led me. I travelled over every kind of depth, and encountered every sort of landscape—sand plains, algae forests, mazes and gardens. I

doffed my hat to three barracudas and a grey shark, scratched the head of a small chap locked stubbornly in his den, a spiny porcupine fish, and then flew down over the luminous sands at sixty feet, serenely happy, glad to be alive. Unforgettable Dissei . . .

CHAPTER 4

DAHLAK KEBIR, DESERT IN THE SEA

I WAS asleep when, at nine in the morning, we arrived at Dahlak. We had had an exhausting time packing up, re-fuelling (we had been told that Dahlak lacked everything, and it was true), checking our supplies, and finally loading aboard a Land Rover lent to us by our temporary guest, Phillip Casciani, one of the most dynamic Italians in Eritrea; this was to help us with our reconnaissance into Dahlak's interior. Work had gone on until dawn and then on top of that we had taken turns with watches. We were now all pretty well exhausted.

Stretched at full length in the bows, lulled by the gentle roll of the boat, I slept. The early morning sun was still bearable. When I awoke and looked around I was surprised to find there was land ahead and on all sides. Evidently we had already entered the channel of Nocra. The land was bleak; I had never seen or imagined such bleakness. Rubbing my eyes I sat up. Could it be true that this was 'my' Dahlak? . . . I had imagined palms, iridescent lagoons, Hawaiian-like beaches and possibly a canoe or two which, bedecked with flowers and filled with festive natives, would come out to meet us over the billowing surge. Don't we all imagine our tropical islands like this?

Cruel disillusion? A length of yellow land lay flat on the

sea, dead level, with no hint of a hill, a palm or even a blade of grass. The sea, a deep still blue, lay there foamless and canoeless. Oh! complete and horrible disenchantment!

*

'But I swear that that village I saw is over there, behind that rise,' I said.

'Which rise?' asked Cecco.

'That thing there, that swelling in the desert.'

'You call that a rise?' sneered Gigi.

'There isn't a village there, honestly there isn't,' said Priscilla, 'but there's one down there on the right.'

'Well, I stick to the one I saw. Don't you remember we turned to the left after you shot at the gazelle?'

'To the left, but then we continued straight,' said Gigi.

'Straight towards what?' asked Cecco.

'Towards the *Formica*. The *Formica*'s over there,' and Gigi pointed across the desert.

'You're crazy. The *Formica*'s there,' I said pointing in the opposite direction.

'You don't seem to have much sense of direction, any of you,' put in Cecco wiping the sweat off his face. 'The *Formica* is tied up at Mersa Nasi, therefore on the west of the island. We have done a complete circle; we started southwards, then we turned east, then north, now we are on the north side . . .'

'There's only the sea to the north,' said Priscilla.

We looked towards the presumed north. The stony sandy plain stretched on and on until it was lost to view. And not only towards the presumed north, but towards the presumed east, south and west. We were in the middle of the desert without a map, without a compass, and without water; we had spent a whole day in Dahlak's interior and had finished our water long since.

'Heavens above,' said Priscilla; and when she swore

mildly it meant that something was about to happen.

'What's the time?' asked Gigi.

'Five.'

'We've been walking eight hours. Is the bottle absolutely stone dry?'

'It was some time ago.'

'This sun's enough to make one burst.'

The desert sent out yellow rays of light that hurt the eyes. In the indeterminate distance could be seen the outline of thin strips of shrubs which appeared reflected in the blue lagoons that shimmered suspended above the sand.

'I'm still convinced that I saw that village,' I repeated.

'Let's toss,' said Cecco. Fatigue was getting us down. Our clothes were soaked.

'Toss for what?'

'Who wins chooses the way.'

'Toss.'

'Heads . . . it's me.'

Cecco guessed right. We reached the *Formica* after dark. We had made the acquaintance of Dahlak Kebir's desert once and for all. As a reminder of the day we carried back the skull of a dromedary.

*

Dahlak Kebir (*kebir* means large) is the biggest island in an archipelago of islands, islets and rocks. With an area of five hundred square miles, it is three and a half times the size of Elba. It has in all nine widely scattered, extremely small villages with a few dozen inhabitants to each. Mostly of Arab origin, the inhabitants, especially the women, are very shy. There are no springs, only a few rain-water wells (when it rains that is, which is two or three times a year) that straight away become pools of disgusting greenish mud. There are

seven or eight palms in all, two mangrove forests along the seaboard, and several sparse clumps of dwarf acacias. The fauna includes gazelle, rats, turtle-doves, quails, sand-grouse in the season of their passage, herons, flamingoes, pelicans, red-billed tropic birds, oyster-catchers, water birds of every kind, birds of prey in great numbers, Arabian bustard (few and bad to eat), guinea-fowls when you are lucky enough to find them, dromedaries and goats, 'domestic' in so far as they are someone's property, but to outward appearances absolutely wild and at full liberty; no one steals them and I would say that no one could catch them either. A property of doubtful value. Sun, desert, misery.

Many of the natives from the Dahlaks have never seen Massawa. The children believe that white men cut off children's ears; the women usually have a manifest horror of whites, while the men show them extreme cordiality and respect. Their faces are dark but not black. The men are of medium height, thin and bearded, with crooked legs. They dress in semi-Arab fashion, in short printed cotton waistcoats and skirts (the *futa*) or else go semi-nude. The young women, the very few we managed to see, since the Moslem religion orders absolute reserve on the part of the young married ones, are surprisingly beautiful. At Nocra we saw a sixteen-year-old girl with a tattooed skin, who would have put any beauty queen in the shade. The old women, on the other hand, are repulsive hags of dried mud and paper.

They are an intelligent people. The men go and fish for sharks, *uasif* and *sadef* sardines, and *trochus* shells from which are made mother-of-pearl buttons. They remain at sea in their *sambuks* for months at a time, while the wives remain hidden in their huts that they call *agudos*, which look like igloos of skins, rags and sticks, and live on goodness knows what. Some of the women work with a fibre rather like

Florence straw, plaiting it into baskets and multi-coloured trays with all the taste of the primitive craftsman.

On Nocra and Dahlak four or five natives a year die from the bite of asps which are as thick as ants; there is an asp under every stone at Nocra, say the locals. We did not see one, but then it was the 'cold' season, and the serpents were lying in coma, inert. One cannot help wondering why the inhabitants of Nocra do not leave that island of asps. Every year one of them is killed. This year it might be the turn of that gorgeous girl, bitten by an asp inside her own house. 'Allah only calls us once,' they say, 'and Allah is great.'

Men and children alike, once we had reassured them, held out their hands in friendship, clutched ours tightly and grinning, pumped them vigorously up and down. Then they touched their hearts lightly and made a slight bow. From that moment we were friends, and they showed us off with great pride.

This same first day at Dahlak Kebir was one of triumph for our fishing companions. When we, the desert survivors, boarded the *Formica* again, our feet swollen, our tongues roasted by thirst, we found the bridge covered with fish, among them a four foot shark, a twenty-pound moray, and a monstrous grouper. We took little notice of them, for at that moment the desire to drink was the most impelling factor. When we had excitedly thrust down bottle after bottle of mineral water and felt human once more, we listened with growing enthusiasm to the stories of our companions. The grouper, in particular, a massive brown bit of bulk with a colossal head, aroused our interest. Unfortunately we had no scales capable of weighing anything so huge, and estimates and arguments only served to prove that even the most skilful underwater fisherman finds himself in difficulties when judging by eye any fish exceeding sixty pounds. It was pretty

certain, however, that the grouper weighed between a hundred-and-eighty and two hundred pounds.

Bruno Vailati was the first to notice the grouper, in fifteen feet of water. He was at the eastern mouth of Nocra's southern channel, and exactly on the southernmost point of it. The littoral there, as we noticed in the days which followed, is a characteristic one: there is no coral barrier and it plunges to the bottom rapidly, even precipitously. The sea-floor lies at a depth of thirty to forty feet, crowned along the coast by enormous lumps of rock encrusted with coral. Now and again, before arriving on the underwater cliff the littoral forms a brief terrace, this too of large blocks. Just on this terrace, near a rock, the grouper was wandering slowly along.

Bruno reached it. The grouper, suspicious, hid itself under a stone mass. Bruno, a yard away, aimed, and shot it in the centre of its skull. With a gentle twist of its head as if it were squashing a fly, the grouper broke the harpoon in two, and remained where it was, watching its aggressor with amazement.

Bruno dashed to the boat, grabbed another arrow and screwed a second harpoon on tightly. The grouper in the meantime had gone down to a depth of forty feet. It still made no attempt to hide in its den. It lay up against a second stone block, as if it were waiting. Bruno went into the attack again. He shot for the second time. The grouper, with a flick of its head, snapped this harpoon as well. The others, having heard what was going on, now arrived on the scene. The grouper, finally annoyed, gave a flip of its tail and departed. They were just in time to see it vanish into the blue.

An hour went by. They had all given up thinking about it. Raimondo climbed back into the dinghy and called Silverio, who was still underwater. Silverio wanted to do a last dive as he thought there might be a decent-sized moray under that

rock. So down he went. Leaning against its third stone block, the two harpoons protruding from its skull like horns, was the grouper. Silverio jumped, returned to the surface and called Raimondo. They went down together. Raimondo shot high on the flank. Silverio did the same and speared it for the fourth time. The grouper made off with the two of them in tow. They travelled like this for some time, how long, they alone know, but they finally got it to stop and brought it to the surface, even though they were dragged about here and there, like bits of straw. With a final joint effort it was hoisted aboard.

It was a magnificent triumph for our friends. Nevertheless they got the rough side of our tongues aboard the *Formica*, for, without letting us know, they split open the skull just to extract the harpoons. Poor Cecco, who had been visualizing 'his' beautiful skull, cleaned and showy, sitting in an Italian museum, laid into them with all the powerful abuse of his well-stocked Roman vocabulary.

The black-fin shark had a different and more dramatic story. This time it was Bruno and Giorgio Ravelli who were on the spot.

Bruno wanted to throw a small explosive charge into the water as an experiment. We had often thought of this as a means of scientific collection; now it was time to try it. A dozen or more sharks immediately rushed to the scene of the massacre. At this spot Bruno and Giorgio were also immersed.

First they saw two arrive. Then three more. Then another two. Then more and more. They came like lightning, their long narrow muzzles stretched ahead, eyes wide open, tails wagging in agitation, pectoral fins rigid in their watery flight. Bruno and Giorgio, it must be admitted, were pink with fear. It was indeed the first time they had found themselves face to face with a herd of hungry sharks. Rather than beat a hasty

retreat they decided to stay and watch the scene, and propped themselves up against a large rock almost level with the surface.

The sharks, all of them black-fins between four and six feet long, took no notice whatsoever of our friends. They rushed madly round and round the area of sand raised by the bomb, hurling themselves on the dead fish on the bottom and those floating moribund in half-depth. The spectacle lasted a good ten minutes, then, finding they had no more prey, the black-fins threw themselves in a heap on the one or two remaining gaterin-fish that were emerging half-dead from their holes. Bruno and Giorgio advanced determinedly and entered the tumult, Bruno with his gun ready, Giorgio taking photographs. Soon a shark gained courage, did a large circle and came up alongside Bruno. Bruno stretched out his arm, pressed the trigger, and speared it immediately behind the gills. His gun had only the short cord used for the capture of groupers and he doubted if this would hold, but the shark did one extremely violent tug and Bruno found he was still holding the beast. Bewildered and frightened now, it pulled feebly at the three yards of cord, trying to dislodge the dogged Bruno. With Giorgio's arrival it finally lost the game. The two of them were able to hold it till Masino Manunza arrived with the boat. Bruno jumped in and began to hoist in his catch, but the shark, with the oddest movements for a non-rock fish, hooked itself under the keel with its tail. Giorgio, still in the water, tried without success to unhitch it. Finally they fixed a hook into its mouth and pulled it up. The shark bit the air in its last spasms.

On board the *Formica* later we discovered that this shark was a female on the point of giving birth. In her bowels she carried four perfectly formed foetus, each a foot and a half long. We religiously conserved them all in a zinc case.

Exploding a bomb under water as a means of killing fish is certainly no innovation. It is in fact the stock-in-trade of certain unscrupulous characters whose fishing is done on the wrong side of the law. It was new, however, in relation to research and scientific collection.

Before trying it out and adopting it as a method of work, we carefully examined our consciences. The first thing we asked ourselves was, did the laws of Eritrea permit it? The answer to this was yes, because there was no legislation on the matter. Was it likely to entail serious ichthyological or biological damage? No, for the dead fish that remained, unwanted by us after we had collected all the specimens we needed, went to feed the larger species, sharks, breams and tunny, and so helped to re-establish the biological merry-go-round. The destruction of eggs and young, doubtless fairly heavy within the radius of the explosion (restricted however to two or three square yards at the most, as we took every precaution to throw very small 'bombs', just sufficient to serve our purpose), was nothing in relation to the indescribable richness of the fauna in that sea; ten hydrogen bombs in the Red Sea would not perceptibly diminish its fauna. And lastly, were we causing unnecessary deaths? No, indeed we were not, as before each throw we took pains to ascertain that it was absolutely essential, and that we could not possibly dispense with it. Certain small and very small fish (those of a few millimetres in length), many of which were rare or even unknown to science, could be caught in no other way, thus necessitating the sacrifice of the less interesting or more common ones.

We threw about fifteen 'bombs' in all, and it was these that gave us our largest number of rare and valuable fish. We made the bombs ourselves by sticking a very short fuse with detonator into a piece of explosive gelatine. We took

particular care to choose a zone which was ichthyologically suitable. Our search for this was long, and ended only when we found a sector of the coral barrier where examples of species not yet in our collection were to be found. Two of us stayed in the boat or on the rocks, ready to jump into the water immediately after the explosion, while the third put a match to the fuse, counted three, and threw. The bomb sank to the bottom, the fuse sizzled in frantic bubbles, then it exploded, muffled in one large bubble of water. From that moment the hunt began.

First we gathered up the larger fish that rose from half-depth to the surface, and then, as the dense cloud of sand subsided, we began the interminable up and down of free-air immersion, searching in every hole and cranny, under the muddy sand that began to resettle on the bottom, retrieving every type of fish. We found the strangest kinds of demoiselle fish, two species of minute sky-blue and white fish that make their nests constantly and exclusively among the protective spines of sea-urchins; those other odd animals, cousins of the sea-horse, only half a finger in length and thin as bits of string, their serpent-like bodies striped in yellow and their beaks trumpet-formed; newly-born moray-eels, fibrous as earth-worms, not more than four inches long; coralline fish which we had never seen before, found hidden in the most exiguous folds of the corals; Lilliputian crustaceans whose classification is still a mystery to us—I could fill pages with the names of the creatures we found.

Fishes and other animals (sea-urchins, star-fish, holothurians, etc.) we collected carefully with our hands, or, if necessary, with a kind of butterfly-net. We wore large canvas or rubber gloves, indispensable if our skin was not to be torn to shreds. It was often necessary to fumble for a long time among the more concealed mazes, surrounded by or built of

madrepores that punctured and lacerated. Sometimes we inadvertently touched a scorpion, which though dead, was still capable of leaving its mark on us.

Research and collection took over two hours and were not accomplished without some danger. Sharks arrived with absolute regularity a few seconds after the explosion, four or five of them on average, although several times the number rose to ten and fifteen. For the most part they were black-fins, white-fins and dusky sharks. Now and again there were other isolated ones, which looked as though they might have been anthropophagous. Not one of these, however, behaved in the least aggressively towards us, or even looked hostile. All they did was rush back and forth in agitation, with the sorry air of scavenging dogs, dogs that throw themselves on refuse heaps, consumed equally by the desire to eat and the fear of being beaten. In fact, as soon as one of us sank on to the bottom to recover his fish, the sharks cowered away and circled round him several yards distant, watching with an expression of peevish impotence. They were, however, ready to throw themselves into the fray as soon as man departed towards the surface. (This in itself was a manoeuvre that had to be executed with a certain prudence. To rise straight to the surface and present the shark beneath you with a pair of undefended legs might be tempting Providence one step too far.) Once more the sharks would throw themselves into the middle, trying to dispatch the last of the prey as quickly as possible, becoming ever more excited and probably more dangerous as the booty became less and less. Each one would intimidate the other by suddenly charging nose-down. As always it was the biggest who drove away the smallest, while the black-fins appeared to be the most enterprising among them.

Sharks grab their prey from above with one jerk of the

head. If the prey is floating in half-depth they snatch it with an impetuous leap, preferably still from above. If it is floating on the surface, they stick their muzzles out of the water a second and swallow it in one gulp, never turning upside-down as tradition has it. Finally they do not chew their food, or break it up; if they can, they swallow the mouthful whole; if it is too big they slice it in half with one bite and return in a few seconds for the other half.

We noticed that the sharks we met preferred to eat on the sea-bed or in half-depth; they rose to the surface only if there was nothing to be had elsewhere. It may also be said that sharks are more at home in deep water, from thirty to two hundred feet; they come to the surface mostly at night, to hunt for tunny and other large fish. But like any other animal on earth the shark has his own personal vagaries and may quite easily be found playing out at sea among the waves in full daylight. It is rare and strange that man should visit the sea-bed, but he does.

The danger from sharks, then, is more a possible one than a probable one. A much more real, but less storied, danger is that of the moray, which in the Red Sea can reach a weight of some dozens of pounds. The burst of explosive had no effect on these beasts whatsoever. They just withdrew into their dens and remained unscathed. Thus when our hands went fumbling in their homes to recover small fish, it was pure chance that saved us from disaster. We certainly got some nasty shocks.

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The shark is the subject of a vast literature, as vast almost as the literature of the lion. Adventure stories, comic strips, boys' books, newspaper articles, pseudo-scientific writings, fishermen's tales, magazine illustrations, and every kind of

film (from the gaol-bird on 'Shark Island' to the ship-wrecked heroes of the South Seas), all these have served to produce together in the popular mind a conception of the poor fish as arbitrary as it is unfounded. Few people could say offhand if lions were to be found in Asia, but most people consider themselves well briefed on the shark and would be amazed, not to say offended, if they were told that the shark they knew so well simply did not exist.

The word 'shark' is in the same category as 'feline' or 'rodent'. Among felines there is the cat and the tiger, and so among sharks there is the 'sea cat' and the 'sea tiger'. There are several hundred species of sharks, only eight or nine of which have been proved to be anthropophagous. The rest are mostly just ordinary fish, enormous fish maybe, as in the case of the whale-shark, perhaps the largest in existence (whales and sperm-whales are cetaceans, not fish), but innocuous to man. Some of them—those without sizable teeth—are even harmless to other fish. Their food consists of plankton, crustaceans and molluscs. If an underwater fisherman tells you one day with eyes a-sparkle that he has killed a shark, ask him its species, and if it is not on the list of anthropophagous sharks in the next paragraph, tell him he's a clever chap but not a hero.

The only anthropophagous sharks are the great white shark, the tiger shark, the great blue shark, one kind of hammerhead shark, the brown shark, the maneater, and the grey nurse shark. Other sharks (black-fins, white-fins, mackerel sharks, dusky sharks) will probably attack man when he is in grave difficulty; ship-wrecked, abandoned wounded and bloody in mid-sea, exhausted or already a corpse. Horror at the word 'shark' is therefore justified only in relation to the above-mentioned. And even these are not consistently anthropophagous.

The shark is a timid fish, easily frightened, often a coward. Our direct experience with the more terrible sharks was, alas, not vast, but it is hardly feasible that some species of sharks should behave in one way and others quite differently, or even contrarily. We feel, therefore, in a position to insist that sharks, some more, some less, are suspicious and cautious and often cowardly, a view confirmed by shark fishermen, serious ichthyologists and navigators whose word can be relied upon.

I have many reasons for affirming that sharks are cowards. Of all fish, we found them the most unapproachable; any movement on our part underwater was enough to put them in a state of alarm. If from curiosity they did draw near, it was always slowly and warily. We found too that when we wounded a shark it did not react in any way against its human aggressor. It remains to be seen whether a tiger-shark or a white shark would behave in the same way. If a small coral fish 'threatened' it, it escaped. We found they were more audacious when in the herd. If some heavy object (a bit of rock, or a spear-gun, for instance) was dropped suddenly above a shark, its first instinct was to flee, and its second, to come back and have a look. It seems, then, permissible to state that *the shark attacks man only if it finds him at an obvious disadvantage.*

Is it true that sharks possess extreme cunning? Fish are by no manner of means as stupid as is generally supposed, and it is evident that confronted with a dead body, or a swimmer, or a man struggling helplessly in the water, the shark has not the same sense of inferiority as he has in the presence of an underwater man.

Man underwater is a fish, not to sharks alone, but to every sort of fish. He may be a queer, clumsy sort of fish that blows bubbles, and seems to have neither head nor tail, but he is a fish all the same. The shark therefore, who is not courageous,

feels curious and at the same time suspicious, and so keeps its distance. When the man in question is a swimmer, however, the shark sees only his legs which dangle above him like a pair of delectable sausages just made to be seized between the teeth.

On the other hand, it must be said that on numerous occasions my companions and I swam for lengthy periods on the surface, that is to say, in the conditions of inferiority to which I have referred. Cecco, Vailati, Quilici and Ravelli once dived into a herd of pilot whales well out to sea, and remained among them for a long time photographing them. I too found myself swimming alone near the *Formica* one day, some way out to sea on a ninety-foot depth, in very turbid water, where a fifteen-foot shark had been seen on the surface the evening before. Ravelli and Quilici had to swim out, also in deep sea, to recover their fins which had fallen into the water while the dinghy was being hoisted aboard. Bucher swam around a great deal in the port of Massawa before capturing his manta. We were, in short, in the Red Sea, one of the most celebrated seas in the world for the shark 'danger', and nothing happened. Were we acting foolishly in the circumstances? I suppose we were, but enthusiasm will often carry a man beyond the normal limits of prudence. Not one of us, however, would have ventured so much at night. At night in tropical seas the law of the jungle is unchained.

To the question whether one can defend oneself from the attack of a shark, the answer is No. A shark, when it has decided to attack, probably after much circling round and under the human prey, hurls itself forward at a speed estimated at about twenty-five m.p.h. A sudden fright might stop it, or at any rate put it off its stroke, but it will otherwise fall upon its prey without giving him time to be either aware of it or even to be able to see it. Furthermore, the shark

approaches man almost always from behind, as we ourselves were able to observe.

Floating is of little use, and running away even less. The only possible way of salvation, and this only if the shark is seen in time, is to swim determinedly towards it, making the deuce of an uproar, splashing hands and feet and giving it no peace, when it starts its concentrated circlings, by sticking persistently at its side. This is easier said than done, but there is no other way out. The idea of fighting a shark with a knife is so idiotic that it barely merits discussion, unless one is referring to one of the innumerable 'calm' small-toothed sharks, preferably sand ones, which lie on the bottom asleep and so can be easily surprised. But the idea that a man can get close enough to give a knife wound to a black-fin or a dusky shark is enough to make anyone who knows them split his sides.

Furthermore to cut through a shark's skin needs not only a knife as sound as a stone and as sharp as a razor, but also leonine force, and leonine force cannot be exercised under water when the body and therefore the arms, lack their accustomed weight; and shark's-skin is known as the toughest leather in the world. We saw the professional shark fishermen from Yemen working on the beach at Dur Ghella and they took three or four minutes (sweating and groaning with the effort) to open up and gut a six-foot shark.

The 'yell at the shark' has become famous since the Austrian underwater explorer Hans Hass disclosed its presumed effectiveness. I do not know if he himself really believed in it, or if he honestly attributed his freedom from attack by sharks in the Caribbean to this 'yell'. Speaking from my own experience I found that a shout underwater did not arouse the faintest emotion in sharks, and those experimented on were for the most part the same species

(black-fins, *Carcharinus malanopterus*, dusky sharks, *Carcharinus obscurus*, and white-fins, *Carcharinus albimarginatus*) as those encountered by him.

The shark, then, is a strange and not easily understood character of the seas, somewhat sybilline, unctuous, and a little oriental. He kills and is a coward, attacks and is frightened, he is curious and a traitor, intelligent and extraordinarily stupid. He is the Uriah Heep of Dickens, Pushkin's Prince Cujskij, and if you re-read Karamazov consider him Smerdjakov. The shark is a character in search of an author.

CHAPTER 5

THE SEA RHINOCEROS

‘WHAT on earth’s this?’ Raimondo exclaimed.

The most unfortunate-looking fish we had ever seen was lying dead at this feet. We were standing around on the deck of the *Formica*, looking at it and touching it in amazement. Raimondo had met it on a shallow in the channel of Nocra. After a long chase he had caught the thirty-two pound beast with a perfect thrust in the side and pulled it into the boat. Raimondo assured us that, in his experience, very few other fish had put up such an obstinate resistance.

The fish was high, compressed and heavily proportioned, with a compact fan tail. Its most singular characteristic was, however, its head. In the middle of its high brow, a sort of hump stuck out. This was as hard as rock although not bone, whitish in colour and with some mysterious function. Its small, piggy eye was high up, and its mouth, about eight inches lower down, was a powerful, prominent parrot beak. The scales of the fish were as broad as a man’s hand and so horny that it needed some effort to get a knife through them. The overall colour of the fish was snake green with touches of metallic blue.

We looked at each other in bewilderment. What was it. Neither Cecco, Gigi nor I remembered having seen the type in or out of water or in text-books. It must be a cousin of the

common parrot fish, and therefore a *Scarus*, but what variety?

We gutted it . . . and the deck of the *Formica* became a stinking bog. The intestines of the rhinoceros—as we called it—contained pounds of coral sand. The repulsive yellow mess spread over the deck accompanied by a chorus of disgust. What was this? Then I remembered reading in Commander Yves Cousteau's account of the French expedition to the Red Sea the previous year, about an extraordinary fish, which like the smaller *Scaridae*, fed on the madrepora for the micro-organisms which it contained and then expelled the indigestible calcareous pulp in frightful clouds. Cousteau and his colleagues observed the behaviour of these animals with care and formulated the theory that the origin of the madrepora sands of the lagoons and the coral shallows could be traced simply to the coral-eating activities of these fish. Cousteau concludes: 'The currents, the sea and the wind heap up the sand produced in this way and so form the low-lying islands . . .' which, in fact, are commonly met with all over the Red Sea. However, 'neither the dynamite of Dumas, nor the gun of Dupas, nor the harpoon of Nesteroff ever had the chance of capturing a specimen'. The Cousteau expedition had to be content with an underwater photograph of the fish.

Now it was at our feet. That evening, we solemnly toasted Raimondo (with mineral water, since there was nothing better).

On the following day we were travelling in our small launch towards the channel of Nocra and discussing the scientific importance of Raimondo's catch. The weather, for the first time, was unsettled. It was the 12th of February. The sea was choppy and breaking against the rocks of Nocra. The ospreys stared at us from their nests and wrapped themselves up well. It must have been cold for them. The temperature had dropped considerably and stood at 76°F.

Suddenly it began to rain. It was fine drenching March rain but warm. We sheltered on the edge of the rocky coast, but in spite of the shelter the sparking plugs of the engine were wet in a matter of minutes. Cecco and Gigi covered themselves with my towel and informed me that if I wanted to cut my towel in half they would have no objection. I told them to forget it and wet as I was, dived into the sea.

The water was cloudy as I dropped steeply into a dead sea. There was practically no coral, the rocks were grey and the waves muddy . . . Desolation . . . I went on.

The rain was beating down. More than once I breathed in air mixed with rain and sea water. The sea was getting rougher and running in white rollers to the coast. The flow back was carrying me out and I could no longer see the bottom. I forced myself back to the coast and had to be careful not to hit the rocks. Streaks of cloud going east transformed the islands into grey and black.

I reached a narrow cove, a few yards long. I had already decided to go back and simply wanted to rest on a rock that would form a barrier to the waves. I glanced under the block. It was concave underwater and hundreds of fish were sheltering there. They were placed one on top of the other (diagrams, demoiselle fish, butterfly fish, trigger fish . . .) motionless like books on shelves or caviar in a tin. One shot down there would hit at least a dozen. The sight made me happy. I chuckled underwater, diving in ten times to browse around that stupendous collection. The fish of the same species did not mix with others, and those that found themselves in forced contact with other species worked busily to drive the other away. The big ones were irritated by the impertinence of the little ones and brushed them off with their snouts and their tails . . . It was a bus full of fish at rush hour. What I would have given to hear their comments!

Then suddenly an enormous dark turreted affair shot by me in the direction of the channel. I jumped and followed instinctively. Just before it vanished I recognized it: rhinoceros! I went back excitedly and it dawned on me that all the time I had been paddling around the rock it had probably been hiding behind it in a yard of water.

So the rhinos were not so rare. The problem was knowing how to get near them. But how was it that we had never seen one on the coast of Massawa and at Sheik Said?

I told my friends about my encounter and we began formulating methods for research into the private life of these enigmatic beasts. Meanwhile the rain was washing all Africa, our outboard motor had become a colander and we had to row down the interminable channel, struggling against the violent counter-current of the tide, bouncing over the waves, and at the same time blowing away the beads of water and sweat from our noses so as not to lose the rhythm. We reached the *Formica* after three hours, exhausted.

The rhinoceros fish or hunch-backs, as Cousteau called them, were seen quite often after this. We met dozens, big and small, in shoals, in pairs and alone, and we captured another two. The biggest, of forty pounds, was killed after a real battle, confirming Bucher's experience. The rhinoceros rivalled that other mysterious fish which we called the 'cefalone' in the efficacy of its armoured plating.

Our second rhinoceros was captured in the southern channel of Nocra, where we had caught the huge grouper. Gigi, Cecco, Priscilla and I were in the water. Cecco and Priscilla were collecting corals and crustaceans inshore, while Gigi was swimming further out alone, armed with an Aer 52, working with compressed gas, quite powerful. I was photographing some butterfly fish and tripping around unarmed. The boat was anchored. Everyone was concentrating on his

own work and not thinking about the others. Suddenly there was a shout.

It was Gigi shouting to me to get my gun and to follow double-quick! He swam straight out to sea. I rushed to the boat, grabbed my gun, loaded it in the water, forgot (fortunately) that my camera was round my neck, and followed in the chase. Gigi was still travelling a hundred yards away, but was now moving parallel to the coast, in about fifty feet of water. Still following up I pondered that in those same waters, a little nearer the coast, I had seen three suspiciously big sharks pass some moments before. I looked left, right and behind . . . But Gigi had no finishing line and continued in zig-zags. I gathered that he must have fired and was watching an animal, probably wounded, on the bottom. Finally I reached him, peered about me but could see nothing. Gigi, not knowing I was there, bumped into me and started.

'Oh, it's you.'

'Yes, it's me. What's up?'

'I've caught a rhino.'

'Where is it?'

'I can't see it now. It's wounded, on the bottom.'

'Where did you hit it?'

'High on the flank.'

Gigi went on searching doggedly, swimming here and there. Then the monster showed up again. It looked enormous on the sandy bottom forty feet below. As soon as I saw it, I made for it with the gun. But by chance or cunning it came up to us and parked itself between Gigi and me. This was unusual, but there was no time for comment. With all this fuss going on and a wounded fish between us there must, I thought, be a dozen handsome sharks around us. I dragged up my legs. The rhino dropped in flight like a rock, with me following. It went to scrape its belly on the sand. I aimed,

fired and hit it square in the side. The arrow bounced. I came up in consternation, but not without noticing that a continuous blue streak was issuing from the white hole of the wound (even blood becomes blue or green at a certain depth). The rhinoceros was as good as finished. We had only to follow it. I wanted to reload my gun, but the flights of the harpoon were stuck up with one of the scales of the fish, the same scale that prevented the animal's immediate death. I tried with all my might to pull the scale off, but I could not move it. It needed a hammer. The rhino was losing blood continuously and in its last agonies. Gigi went down and tried to get it with his hands. I followed behind and took two photographs. The fish was still moving and free. But in that moment Cecco, the *deus ex machina*, arrived with a gun. He dropped on the fish with all his physical strength and pierced it with six inches of steel. Victory was ours.

The third rhinoceros, which was almost as big as the second, fell to Gigi personally, on the eve of his return home. During our explorations we met others, but let them go. One was already in formalin (occupying almost the whole chest) and from the second and third we took specimens of the extraordinary jaws, bones and scales. A microscopic examination of this material established that the fish we three captured that day was about thirty years old.

We studied the habits of the *abou-couroungiam*, as the native fishermen call them, on several occasions in different places. Like Cousteau, we saw them discharge their clouds of coral sand in the shallows. We confirmed that this was the same sand as that on the bottom. Furthermore, after two months we were able to establish the favourite variety of coral of our fish. It is an unmistakable tubular formation filled with colonies of polyps. This coral is generally found in shallow water and is more common in the Dahlaks than in the region

of Massawa. This is the reason why they prefer Dahlak to Massawa, and why they are found especially on the southern shores at high tide this side of the barrier in three to six feet of water.

We often studied the castles of madrepora that had fallen down or were in process of doing so, but could not explain the phenomenon. Then one day, I—unfortunately alone—watched a mastodont at work. The rhino was slowly ramming the fragile rock with its powerful head and eating the pieces that dropped off. Little wonder that the bump on its brow was as hard as marble!¹

Of all the animals that we met in the tropical waters of Dahlak the rhinoceros intrigued me most. It is a horror to look at but, poor thing, it can't help that. It is certainly unique in its habits, with that goat face always on the change, its eye lost in the middle of its shoulder, watching and winking like a one-eyed Polyphemus.

¹ On the eve of publication, Francesco Baschieri, who is preparing a paper on the rhinoceros (see Appendix) informs me that he has come to the conclusion that the high brow of this fish is not meant for splintering coral. He has reached this conclusion through biological, ichthyological and osteological observations which he considers founded *a priori*. Therefore I can only ask why my rhinoceros was hitting its head against the rock. Perhaps it was in despair.

CHAPTER 6

MERSA NASI

ON 13th February the *Formica* anchored in the Channel of Nocra before Mersa Nasi and unloaded most of her guests: Casciani with his jeep, Giorgio Ravelli and Folco Quilici with their cameras and photographic equipment, the Bucher couple with their underwater guns, Priscilla with her brushes, paints and paper (Priscilla paints tropical men and fish with great talent), Cecco, Gigi and I with our spear guns, shot guns and the entire scientific arsenal—zinc chests, wooden boxes, glassware, jars, flasks of formalin, wadding, straw, various instruments, fishing tackle, cameras, ciné cameras, and tools of every kind. We had two boats with outboard motors: one was twelve feet long, getting on in years and suitable for donkey work; the other was large, fast and ‘distinguished’.

With us was the landlord of the house we were to live in, a house he had built alone with the help of a negro, the only house on the boney coast of Dahlak Kebir. He was an Italian with a pleasant pirate face and a Turin accent and his name was Silvio Nasi. From Massawa to Asmara, and I would say even further, it was enough to mention ‘Nasi’ to win the immediate friendship of the natives or arouse the suspicion of a European . . . Nasi had been a corsair in three or four continents, a millionaire, his own bricklayer, a millionaire

again and then the architect and builder of houses for himself and for others. Nasi had built half of Massawa, had organized and owned the pearl-fishing, shark-fishing and sardine-fishing, had probably trafficked with guns or tanks and had certainly been the 'Sponge King' or the 'Mother-of-Pearl King' (Mersa Nasi, named by him, is the centre of these industries). Nasi, with a face burnt and desiccated by fifty years of tropical sun, an aquiline nose and grey eyes, had had the oddest experiences, both passive and active that could ever befall anyone. He was a man of the most amazing vitality.

Now, this extraordinary gentleman, the type who would be the central character in a novel of the tropics or a film about the South Seas, opened the hingeless door of his villa to us, with a large smile. The villa had, in fact, been sold to the Governor of the island, Sheik Serag (an intimate friend, naturally, of Nasi), but its builder and former landlord quietly considered it his again, for his occasional guests. On these occasions Sheik Serag avowed that he was only *too* happy.

This white house, which was pleasantly situated on a hump, commanded boundless horizons: the desert lay behind, and in front there were the gulfs of the coast, the bluest pools locked in by burnt land, the Channel of Nocra at its feet and beyond, the island of Nocra itself and other smaller ones lost in the distance. Down on the left the great bay of Ghubbet Mus Nefit opened out.

Nasi talked with both nonchalance and pride of what had been one of his four hundred activities—the fishing, working and marketing of mother-of-pearl. All round the house and its broken-down garden wall lay thousands of shining fragments of *trochus* shells, hundredweights of bulk mother-of-pearl, dazzling on the ground like mountains of mirrors; and

between the fragments a hail of buttons, almost ready to go on a hundred shirts, the entire spectacle abandoned to the derision of the mice and the kaleidoscopic enthusiasm of the sun.

'Goodness knows how many snakes there must be around here,' Priscilla said.

'Snakes? Oh quite a lot. Asps. But they run away. They don't do anything.'

'Have you seen any?' Priscilla asked.

'Have I seen any? Hundreds, thousands, millions . . .'
Nasi smiled.

'And weren't you afraid of them?'

'A bit . . . but they don't do anything. They run away. There's no need to be afraid.'

'But has anybody here been bitten?' Priscilla wanted to know everything.

'I don't think so . . . oh stupid, of course—I was bitten once.'

'You?'

'Yes. I was building a house. I went to get a plank from a pile of wood and there was an asp underneath. He bit my wedding-finger. Look here, see the scar. He hung on so hard that when I drew my finger away he was still on the end of it. I had to juggle my hand about to make him drop. Then I stood on his head, went home, got a razor blade and zac—cut the tip of my finger off. So you see I ought to be poison-proof by now. On another occasion I was stung by a ray right here at Dahlak. Another time I was on a motor bike—just think of it! I was coming round the bend of the high road from Asmara when I shot into a gully and flew for three hundred yards over a forest of prickly pears right to the bottom. I *was* in a mess. I think I was on the point of death for twenty days—but now, I can't even remember how many

bones I broke. You see, Miss, I think a man dies when he wants to, or when somebody else wants him to!

At first, I must confess, I hardly believed this list of miracles. But I was assured from other quarters that they were perfectly true and that there were still other adventures even more picturesque.

*

Our exploration of the channels between Nocra and Dahlak, as well as the neighbouring islands, revealed a wealth of important material. While the underwater fauna of the channels was not so extensive or varied as that of the islands, it was more interesting as regards formation and habitat.

The channels are like rivers of salt water, alternately cold and hot. The temperature of the water is about 72° F at lowest ebb-tide and up to 97° F at high tide on the beaches. The sea animals join in continuously in this see-saw of the waters. In general the coral fish (*Chaetodontidae*, butterfly fish, *Scaridae*, parrot fish, *Labridae*, rainbow fish, *Serranidae*, groupers, *Diodontidae*, porcupine fish, etc.) lead a sedentary life, without exploratory adventures in the tidal zones. But if these do not leave their own littoral territory, there are other fish that participate fully in the movement of the waters. Great swarms of little *uasif* sardines drift into these channels, especially at night, and are followed by platoons of bream, tunny, barracuda and sharks. The sardines in their turn follow conspicuous banks of very thick plankton, and are accompanied in this hunt, or rather in this grazing, by the famous gigantic mantas and another fish—the mysterious individual with the clear fins.

The sharks seem to be the most daring in their scouting

between the cold currents and the warm, temporarily stagnant waters. In fact, every time we explored these improvised lagoons, where an hour earlier innumerable sea birds and sometimes lines of dromedaries had been walking, we encountered black-fin sharks of three feet or more in as little as three span of water. There were also guitar-fish four or five feet long, and many rays and sting-rays weighing some dozens of pounds.

The reason for this invasion into new waters is evident. The immense, shallow and muddy beaches offer the rays, the sting-rays and the guitar-fish an incalculable quantity of molluscs which they can nose up methodically from the bottom. The black-fins, on the other hand, hunt for mullet and other small lagoon fish. It must be noted however that the regular and persistent entry of the black-fin shark and sometimes of the dusky shark into the low-tide waters has only been half explained by us.

The madreporic formations in the channels are few and often practically non-existent. Besides, it is well known that coral needs the open sea for its existence, and a constantly changing water carrying with it fresh and plentiful forms of nutrition. It is true that the water of the channels is always in movement and extremely rich in plankton, but coral needs water at a constant temperature and not below 77° – 86° F—a condition which does not obtain in the channels. The proof of this observation lies in a study of the position of the few existent madreporic formations. All, without exception, lie in restricted tranquil zones, protected from the direct flow of the current, in water that has a chance of becoming tolerably warm. In addition, madreporic formations need pure, clear water. The water of the channels was unsuitable in this respect since it carried sand washed away from the lagoons, beaches and sea-bed.

We studied this vast zone for twenty days. A total of

seventy hours were spent on underwater observation and many more on observation on land. Left alone in Nasi's house a few days after landing (our companions left us to set up an advance post on the islands of Enteara and Cundabilu and then go back to Massawa) we had to continue our work in conditions of some discomfort. Water and food were rationed and we had to make a seemingly endless series of sacrifices great and small as patiently and as cheerfully as we could. Winds and rain came, the sea got up, Gigi fell ill with a tropical sore on his leg. Drinking water was warm and rationed in spoonfuls. Apart from fish and spaghetti we had nothing to eat. The expedition had left Italy poor, and poor, very poor, it remained, especially for us of the scientific group. Despite all this, we carried on with our work regularly every day both in the sea and on land.

The following notes are from my diary, written partly in pencil and partly with a ball-pen, covered with finger marks and stained with coffee and other mysterious many-coloured substances:

'Friday. The coast of Mersa Nasi. We have collected a lot of material and about fifty shells of different kinds; many cowries. As usual, Cecco found twice as many as me at the beginning. I furiously uprooted a dozen blocks of madrepora and turned them over. I went back when the cloud had settled. Between the blocks there were three or four brains (the 'brains' are the cerebriform madrepores, existent in various species). Under each one of these, in the calcareous fold of the mantle, I saw two, three, four and up to six cowries. I carried on and kept on finding them, although only under the brains. I had, it seemed, discovered by pure chance the daily *habitat* of the cowrie (these are nocturnal creatures). I broke the news. Confirmations and exceptions proved the discovery. Then I collected two magnificent asteroids (star fish) fire-red and blue-spotted. Cecco went into the first southern gulf at high tide, water 30-50 cm., arrived almost in the middle, saw the fin of a guitar-fish (guitar-fish shark), waited for a shot with his Browning, fired a couple of bullets and nipped it in the back.

The guitar-fish splashed around and floundered on a flourishing bank of madrepora. Cecco started hopping along in a way that nearly killed us with laughter. He shouted with pain (madrepore, as you know, is fakir territory) but kept on running. We could not assist because he was on the other side of the tidal channel. All of a sudden he slipped, went head over heels and landed with his back on the coral. The guitar managed to get afloat and cleared off; it was at least four feet long. It seemed that Cecco must be in shreds, but he got up painfully. We went to get him, going the long way round. He was covered with blood but did not say a word. On the way back we got five new birds (for our collection).

'The San Pellegrino (mineral water) is all gone, the *Formica* will pass by in two or three days and go on to Massawa. All we can do is boil the water from the tank and say amen.'

'Monday. Drizzly, with a high sea, the *Formica* dancing the samba. I went into the hold with Gigi to fill two flasks with formalin (the chest filled with fish had been overturned by a wave and we had to do all the work again). I got splashed with the formalin and just managed not to faint. Choking, I somehow managed to get on deck and felt wicked until the evening.'

'Wednesday. Nocra Channel. We collected coral and echinoderms to-day and filled the boat. Suddenly I discovered the head of a fine moray peeping out of a crack at the bottom of a rock. I drew close with my camera and took two shots. At the second shot the moray came out of his hole for the length of its neck and looked menacingly at me. I called Cecco, showed him the beast and he went down with his gun and harpooned it. I photographed the struggle. Then I took the gun and found myself with Cecco in front of a kingfish of at least forty pounds. I fired and hit it full on, but it broke the harpoon clean in two in an instant. The harpoons will have to be welded at Massawa (on to the arrow, that is, to eliminate the constant breaking point—where the harpoon is *screwed* on to the arrow). We came across three eagle rays. The biggest was the female. The two males were courting her. They fluttered behind, flapping their wings, touching her and pushing her, but not annoying each other. All this happening in a foot and a half of water. Such nice people . . .'

'Friday. We have been seeing the 'cefaloni' (those fish with the clear fins) for two days. We shall have something to say if we don't get at least one. Cecco got near one to-day, fired, got it

full on, but as usual, the fish split the steel cable (we had replaced the nylon cord with a thin steel cable) and carried off the arrow. We are losing face.

'In a small sea bay we observed a group of pelicans. They were big-bellied and 'Derbyshire-necked'. They floated on the still water like rubber ducks. Cecco and I left the boat for the water with the idea of catching a pair by the legs. We approached them indirectly. Suddenly a three foot shark appeared between us. We bobbed up and then continued. Deep breaths and endless underwater stretches. Eventually we saw the yellow webbed feet of the pelicans, paddling elegantly down there in the water, the white globes of their rears gently immersed. But just at that moment the pelicans became suspicious, started shuffling around, flapping and at last took off with a roar like so many seaplanes. We were left behind empty-handed.

'At another point, about a hundred yards from our boat, we noticed something white and motionless on the sea, which to-day was like a marsh of still cloudy water, opaque blue. We went to have a look. It was a puffer fish. He was inflated and spiky, floating belly upwards as if stone dead. The tetrodont or puffer fish can inflate itself in the same way as the diodont or porcupine fish, when in danger; but while the latter inflates when in its nest and becomes locked in by its spines, the puffer fish floats to the surface and then tips over on its back, its stomach surface stretching much more than its back. At the same time its small but numerous spikes show up. We approached him in the boat, and took him up with our hands. He began a funny, plaintive pig-grunt and blew himself up more than ever. We got into the water, put our gauntlets on and began playing water polo with him—but gently, because we did not want to hurt him. Finally we photographed him up and down and as we already had a specimen we then left him in peace. As we left him behind we could still see the little white balloon bobbing on the water, with his fine baronial stomach stretched for sun-bathing. What a pleasant little chap he was.

'In the afternoon I discovered a black-fin on the sea floor. I chased it with a gun, but it escaped. Afterwards I found a curious fish like a saxophone, an unknown species. Cecco guaranteed us a good supper with a red bream weighing eight pounds. I met two barracuda. They got away, they always get away. Groupers everywhere, thousands of groupers.

'We got back in the evening rather drunk. We had been away eleven hours and had spent eight of these under water. The boat

was full of material. We worked until ten o'clock sorting it out. As I write up my diary my eyes are closing: Good-night.'

*

Tesfankièl Berbè!

He came one night, quietly. He appeared at the door of Nasi's house, looked around and came in. We were having supper in the main room on the ground floor. We too looked at him, dumbfounded. Where had he sprung from?

'May I?' the negro said.

'Come in,' replied Gigi. But the negro was already in the middle of the room, bowing slightly and smiling.

'Me disturb,' he said, and his mouth opened in an enormous grin, showing his big white teeth. He had an intelligent handsome face, and was wearing a white flannel waistcoat, a pair of canvas shorts and sandals. We were still barefoot and in bathing costumes.

'You are not disturbing us at all. Come in and sit down. Would you like something to eat?' I said.

'No thanks, no thanks. Just eaten.' The negro sat down at a respectful distance. The gas lamp threw black and white flashes on his face, and every now and again, with the breeze, it lit up the whites of his eyes. He was silent. He watched what we were eating: roast fish, tinned meat, a banana each. He was probably twenty or thirty.

'Where do you come from?' Cecco asked.

The negro pointed with his thumb in the direction of a brick hut about three hundred yards from our 'villa'. Eight or ten Eritreans and Dankalians lived in it and during the day worked like beasts in a cave of small rocks, which they loaded on to the sambuk that came from Massawa twice a week. They worked in silence under the sun at a temperature of 120°-140° F and quarried even at full noon. They were on

piece-work and they had used their fists to get the job. They ate a basin of kneaded wheat per day and slept on the ground. For two months they had seen no one except the men who came on the *sambuk* twice a week.

'You are one of those?' Cecco said.

'I watch the gang. I am the trusted man of the boss.'

'And who is the boss?'

'An Italian. He's a builder.'

'And what are they going to build with this stone?'

'A church.'

'Coptic?'

'Catholic! It's the Fathers who are building the church.'

'What Fathers?'

'The priest Fathers.'

'And are you a Muslim?'

'Catholic! Always been a Catholic. I was to have been a priest too.'

'And then?'

'Then knew women, and kalàs.'

'What's the meaning of kalàs?'

'Finished, closed: kalàs.'

'And where were you born?'

'In a village in Eritrea.'

'And what do your people do?'

'My father dead in war with Italian. My mother work in the fields. Good woman. Me wanted to be priest.'

'And you instead . . .'

'Kalàs.'

'What's your name?'

'Michael.'

'Michael . . .?'

'Tesfankièl Berbè: Tesfankièl is like Michael in your language.'

'But you speak Italian well.'

'Learnt at school from the Fathers. Speak Amarian and a little Arabian. Then some Tigran and some Dankalian. We have hundred languages and thousand races. I know write and read, do sums and know the prayers. I know also the books of Solomon.'

'Which Solomon?'

'King Solomon. Our first father, our king.'

'And what's written in his books?'

'Oh, many things. Had aeroplanes and made a tunnel with golden pavement from Jerusalem to Axum under the Red Sea.'

'My! And is the tunnel still there?'

'Sure it is.'

'Have you seen it?'

'Not me, but lot of people seen it.'

'And have they taken the gold?'

'Not that.'

'Why not?'

'Because who goes in tunnel dies.'

'How's that?'

'Dunno.'

We looked at his face. He was a likeable fellow.

'But why have you come here?' Cecco asked. 'Do you want something?'

'No. Me no want nuthin'. Come to make call.'

'You are very kind. A cigarette?'

'Oh, thanks.'

'How old are you?'

'Twenty-four. Time to get married.'

'That's right. Are you engaged?'

'Ho—you kidding? Been with harlot woman until yesterday, then sorry and kalàs, go off. I asked boss to send me here

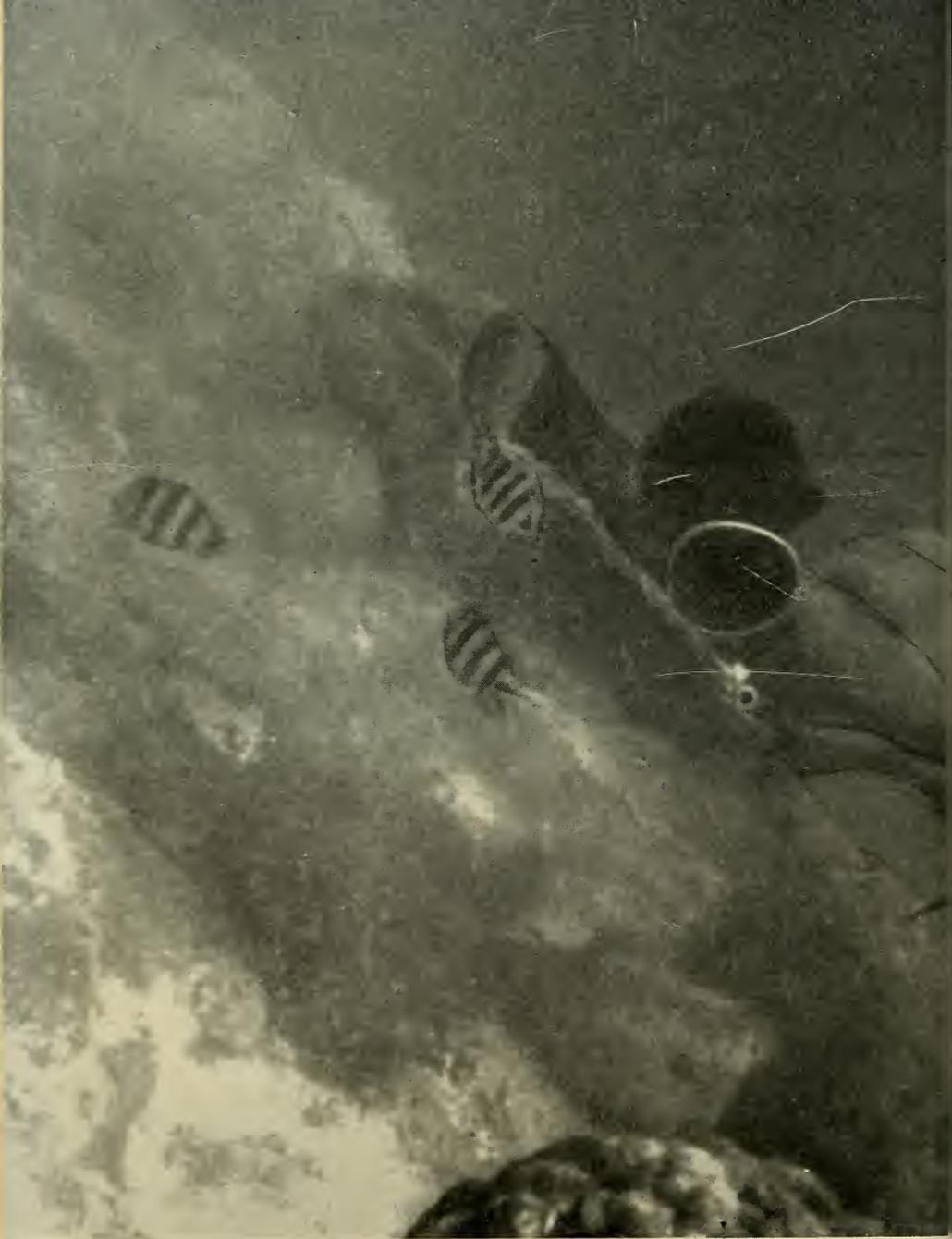


11. *The manta that was harpooned in the waters of Medecheri.
Notice the odd ventral marks and the rat's tail.*

12A. *In shallow water, small sharks fled
before the prow of the boat like frightened
mullet.*

12B. *A small black-fin, caught in the nets,
shows how 'flexible' members of this
species can be (and how angry). Our
friend Casciani from Asmara enjoys the
'tail-pull'.*





13. Roghi with one of the many barracudas captured by the expedition. The barracuda is not only a suspicious-looking character but an immensely ferocious-looking one. He never showed himself to be



aggressive towards us, however; in fact he was very much the opposite, almost cautious. The photograph was taken at the base of the barrier at a depth of about 42 feet.



14. *This large moray, shot in the neck by Baschieri, leaped from its den with a quite savage impetus. Baschieri had to get himself out of the way quickly, and only later managed to recover it, dead.*



15. *The puffer-fish, when frightened or tossed about by something, floats on the surface belly upwards and blown out with air, looking like a puff-ball with a tail; it is the easiest thing in the world to catch him with one's hands. When I did so, he grunted, distinctly, and blew himself out still more. He was so delightful we restored him to liberty.*



to Dahlak. Now I stay here two weeks till woman find another. Then go back to Massawa.'

'To find a wife.'

Tesfankièl smiled. The lamp illuminated his teeth. He smoked seriously, inhaling slowly. You could see he was a smoker.

Gigi got up. It was his turn to do the washing-up. He placed the plates carefully in the large saucepan, filled the whole thing up with cutlery and glasses and went off to the wash-house—which in our case was the sea. To get there you had to go down a steep flight of steps between the rocks, make some nasty bends and then jump with a certain agility on to a small beach some two yards below, that was completely covered at high tide. It was a desperate job, washing up with madreporic sand, but in compensation the water threw up a thousand phosphorescent sparks, and you felt you were rinsing the dishes with fireworks. So Gigi went off, and without saying a word, Tesfankièl followed him into the night, with that silent, flowing step of his.

After half an hour they re-appeared. Tesfankièl was carrying everything. We looked at Gigi and he opened his arms as if to say—and what can I do? Tesfankièl had requested the pleasure of washing the dishes for him, had in fact insisted. We had a brief conference while Tesfankièl quietly dried our things in the cubby-hole that served as a kitchen.

'He's after money,' said Cecco.

'Well, I think he's finished his cigarettes and he's come here from sheer desperation,' I rejoined.

At that moment, Tesfankièl came in. He sat down at the table obviously satisfied. He took an almost full packet of Camels out of his pocket and offered them round. After some hesitation we all took one. We had been chewing Nazionali

for a month. Now we smoked without talking, without looking anyone in the eyes.

Then Cecco came up. 'Tesfankièl,' he said, 'we should be really happy if you would stay a little with us. We need somebody to help us. Would you like to stay with us while we are here?'

'Ah, very much, Mr Cecco.'

'How do you know that they call me Cecco?'

Tesfankièl smiled.

'You are called Cecco, that is Mr Gianni, that is Mr Giggi, and that is Miss Pircilla. My name not Teresfinkiel, but Tes-fan-kièl, Tesfankièl like Michael.'

Cecco scratched his head.

'Listen, Michael, I want to make you an offer. We'll give you two dollars a day and you eat and stay with us. All right?' (Eritrean dollars were worth about 2s. 9d. each.)

'I no want money, Mr Cecco. Me happy to be with you. No need money. Don't speak 'bout money. Me come as friend.'

From that evening Tesfankièl was our inseparable, precious and irreplaceable colleague. He knew nothing about the sea, but his good will in the most humble tasks and his honesty as our camp manager were really moving. He was a wizard at sums, had a prodigious memory and remarkable intuition. In two days Tesfankièl called Michael became our camp chief, our cook, our provisioner and factotum. And before long he learned to handle the formalin and the alcohol, the chests and the bottles, with intelligence and precision.

He stayed with us almost to the end, leaving his job and his boss in Massawa and suffering hunger and thirst with us. He stayed, that is, until he fell ill. When I got on the plane at Asmara, he said good-bye to me with tears in his eyes and some days after that he entered hospital. He had caught

some strange tropical illness, with fever and swooning, perhaps caused by all the strain of having worked with us. He wrote to me saying that within a fortnight he would be well again but that his boss had sacked him for his treason. I hope Tesfankièl has been taken on again. I hope still more that he has found his dove.

CHAPTER 7

HUNTING AND VISITING

FOR some days, Gigi, Tesfankièl and I were the only ones on Mersa Nasi. Priscilla and Cecco too had gone back to Massawa to put some of the material we had collected in order. They embarked when the *Formica* called, waved to us and disappeared down the channel. Then the weather got worse. It did not rain but the sky was continually overcast and the air was still, suffocating and oppressive. Only during the night were there some warm, gentle showers.

The sea was turbid and uninviting, so we decided to take a trip inland with the laudable purpose, apart from that of serious research, of finding some roast dish that would alleviate the boredom of bream and bully beef.

We had lived a long time in Nasi's house without ever stepping in the direction of the vast undulating horizon at our back-door. Sometimes I went up on to the roof of the white house and gazed out for a long time, but there was nothing new or interesting to see, to seek or to know. The landscape did not move and had not moved for years. It was outside space and time. A desert, nothing else. And yet one's eyes and one's inarticulate thoughts went out unremittingly into that landscape, waiting for the miracle of some sign of life. The falcons were high overhead and were no part of the dead unmoving landscape.

On the roof of that little house it was easy to sweep over and reconstruct in one's mind the millions of years past and to come. It was enough to look at any of the stones. Absolutely nothing had ever moved them from their primaevial position, neither wind nor rain nor hoof of beast nor man. How then did these stones come to lie just where they were? . . . Thoughts strayed behind the grey blanket of the sky and accompanied the buzzards in their dizzy flight. The desert was like a courtyard, like a yellow line up to the threshold; the breath of the desert came through the open door of the house. It was ever-present, insistent and dominating. It was no use turning one's back and trying to lose it by going down to the sea. The desert continued to vibrate and melt in the atmosphere. This was the sole illusory movement that took place upon that petrified crust.

We had already had experience of the steppe to the south of Mersa Nasi, an unfortunate experience as I have related, for we had got lost there, but we were now curious about the territory to the east and the north, as yet unpenetrated, but certainly more interesting. There are several fissures in the region, due almost certainly to earth movements of considerable force. Dahlak in fact is still subject to violent seismic shocks and in 1921 Massawa was almost completely destroyed by an earthquake.

In these fissures, which are really furrows and channels in the flat, sandy land, there are thickets and sometimes even woods of thorny, dwarf acacia. These thickets are almost invariably bare of grass or bush, but animals find shelter in them. Dromedaries and goats find shade and food there, while gazelles make their dens in the thickest parts and pairs of doves or more often six pairs together nest on the branches of the little trees.

For gastronomical reasons, we concentrated on these

latter, which are smaller and thinner than our own, but no less tasty. We had one weapon for the job, my short-barrelled 22 Beretta. Cecco's Browning was out of action after an encounter with a heron. He had only wounded the bird (Priscilla, like a good English girl could not bear to see animals, even fish, suffer, and expected the *coup de grâce* to be administered at once) and was intent upon finishing it off with the butt. But instead of striking the heron, he hit a rock, and the butt flew into the air in two pieces, the various springs, nuts and bolts and screws flying off in all directions.

Trying to kill a dove with the bullet of a 22 was rather like putting a camel through the eye of a needle wearing boxing gloves. We had to get up to not more than ten yards distance, in silence, doubled-up, holding our breath, sliding on the difficult ground and scratched by a hundred thorns. The bird stood perched on the branch, in the company of its friends, all of them proudly sticking their chests out. If the approach had been perfect, an accurate shot could bring it down cleanly. But if it flew off before, or escaped the first shot, it became suspicious and would not be so easily taken after alighting on another nearby acacia. Gigi was a past-master at turtle dove shooting. His highly refined art lay in a long furtive, earth-slide like a cobra. Very often he beat me by one or two birds because I let impatience get the better of me and indulged my academic taste for a long shot which usually made holes in the leaves. In all, out of ten shots we managed an average of four turtles. These were quite sufficient for our evening meal.

Turtle doves were our ordinary prey, and buzzards, vultures, kites, and ravens fell victim from time to time for our ornithological collection of resident avifauna, but more than anything else we searched for gazelles and Arabian bustard.

As in the case of the phoenix, everyone swore that there were bustard, but nobody knew where. Grazioli had come across two of them at the side of the road when he was running around in the jeep after the first disembarkation. He fired at them, but without any luck. According to the teaching of Nasi, the bustard arrive only after the rains and settle beside water-holes, where they live in splendid isolation sometimes for months. The rains which we had experienced, although they were the only ones of the year, would certainly not be able to change the environment sufficiently to attract a great number of our desired prey.

One day, however, Gigi, Tesfankièl and I set out with the intention of combing the entire desert and all its gullies to come upon even the feather of a bustard. And we found ourselves right on top of one near some dried up holes of greenish water. It was taking a walk under a thicket of acacia, all alone, and was preening its rear and its featherless neck like a sour old maid fully aware of a debatable attraction.

Gigi was the first to notice her. Gripping me by the arm—I had the rifle in my hand—he whispered excitedly: ‘Look there!’ It was so far off that it looked like a sheep. I began to creep. I had to cross a hundred yards of open ground before reaching the thicket. After doing that successfully I got behind the first tree, where I could observe that extraordinary bird in peace. Now it looked like a miniature ostrich, pale yellow in perfect camouflage. After another ten yards on all fours and at about a hundred yards from the bird, I decided I’d let her have it. And at that very moment the bustard started to hop along. Then she took off and cruised overhead, but out of range, as noisily and impressively as a four-engined aircraft.

It was then 3 p.m. and we followed that accursed bustard until darkness fell at 8 p.m. She let us get to within two

hundred yards of her, compressed invisibly, as we were, in the wrinkles of the terrain, only to take off again and land about a mile away. All our strategy, tactics and encircling movements were useless. We did not succeed in firing one shot, not even in anger. We got home more dead than alive. And since the scientific name of the bustard is *Otis tarda* we thought it legitimate to re-name it *Otis bastarda*.

Our luck with the gazelles was no better. Four of these adorable creatures had, as a matter of fact, already fallen under the fire of the expedition's guns. During the first disembarkation Casciani and Alberto Grazioli, driving a new type of land-wagon (the jeep went back with its owner to Massawa), had made a practice of tearing after the timorous daughters of the oasis at forty miles an hour if they came across them in the open desert. At first the gazelles sped off in terror and at an incredible speed, but after a hundred yards or so they tired, were overtaken and shot at short range.

This honest account of our hunting exploits may displease the reader, but he must remember that in the solitude of the desert, with the work we had to do and with our inadequate and monotonous diet, fresh meat was an important consideration, and, it must be admitted, a coveted dish. In fact, when Casciani and Alberto brought back the spoils, even the gentlest of us found ourselves compromised between our stomachs and our sentiments.

Gigi and I, however, wanted to shoot a gazelle unaided except for our sole rifle. Our motives were once again quite prosaic but none the less valid.

We caught sight of a splendid male gazelle to the north-west of Nasi's house in the wide base of a peninsula. As soon as he saw us the animal fled west towards the promontory. He had trapped himself. It was about 4 p.m. and we had been walking all day long. Tesfankiël was loaded with bird

specimens. Gigi was not feeling well and was following us only by force of will, dragging his legs as he went. He had a temperature and was feeling weaker every hour. These were the first signs of what later turned out to be a serious infection. When we sighted the gazelle, the third that day, Gigi did not have the strength to follow me in the chase. The sun came out unexpectedly from the haze, scorching an atmosphere which was already unbreathable, because of the stagnant humidity. It was the last straw. Gigi dropped down dejectedly and asked for something to drink. The gazelle became a white spot on the distant plain. I gave Gigi all the water that was left and when I saw that he was brighter I sent him back home with Tesfankièl.

I remained alone and continued the hunt.

I walked for half an hour and saw the gazelle under the open umbrella of an acacia. But he saw me too and flew off again. I studied my position carefully, chose a direction, followed this for twenty minutes and came out on a shelf of the peninsula in front of the sea. Fifty yards away two gazelles dashed off like greased lightning. I fired. But the gazelles had disappeared and only clouds of dust trailed behind them towards the peak of the peninsula.

But I wouldn't be beaten. I caught sight of the big male who was evidently in search of his mate. I set off again. I pushed on for half an hour or more. The sun beat down mercilessly, yellow and horrible. I took out my handkerchief and knotted it round my head. After a while I took off my shirt, squeezed the sweat out of it and put it round my waist. After another hundred yards I took my trousers off, made a bundle of my things, put this on an acacia tree that would be on my road back and was ready to carry on naked. My tongue was swollen with thirst and my eyes stuck together with fatigue. At a certain point I felt I could not go on, so

I decided to make for the sea. I reached it on the left, but it too was to be denied me. The rock was not high but it was sharp on all sides. If I jumped there was a feather-bed landing of sea urchins and coral to greet me plus the impossibility of climbing back up. I was standing meditating upon my bad luck, when all of a sudden, a shark about a yard long, passed under my nose in three feet of water four yards from the edge. Without hesitating I aimed at it sadistically and planted a bullet in its neck. The shark leapt out of the water, turned over on to its belly, bit the air madly, was swept into the current and went down vertically with one last gasp. I too had become a beast.

I went on. Ridiculously naked as I was, I felt swollen and livid with an unfamiliar ferocity. I was suffering and therefore entitled—so I believed—to any act of wickedness. I was aware of the greedy joy of knowing that for all the world and beings that lay hidden around, I was the mortal peril, the Enemy, the terrible, sovereign Being. That tarnished rod which I grasped was the destiny of all and sundry in that filthy peninsula. I carried on, sucking my burning lips and going mad with the heat. All at once, I saw the two gazelles in a glade.

I noted the ground. Between me and them there was a big rock. I could draw up behind this. There was no wind. The animals were quiet. The day was mine.

I got on all fours. I could not feel the heat any more. I was not thirsty. I could not feel anything at all. My eyes were glued on the two prey. I did not even look where I was putting my knees. I crawled like this for two hundred yards. On reaching the rock I squatted behind it calmly. Now they were mine. I knew that from where I was I could shoot with accuracy. The gazelles had not noticed me and were grazing forty yards away.

I lifted the barrel slowly. I looked out . . . and saw, near the two animals, a smaller one; a young gazelle, all legs, with two big flapping ears and two enormous eyes. It trembled with nervousness. Its father browsed quietly while the mother looked on.

I remained unexpectedly immobile. And at the risk of sounding banal, I record that my five-month-old child and my wife passed through my mind. . . . I lowered my gun and prepared to move away; but the young gazelle saw me, and startled, cried out. All three flew off like the wind with their heads up, in the direction of the great plain behind. The poor little chap followed his parents, bouncing along on his four stiff legs, unable to keep up with them. Then they made a half-about-turn, put him in the middle and carried him off at all speed from the Enemy, who remained on his rock, watching them escape and feeling his spirit relieved. For a great number of reasons he felt a lump in his throat.

Gigi passed that night in hot hell, with the temperature of a camel. He began to notice vague pains in his left leg, but dismissed them as nothing to worry about. Both of us thought it was the effect of too much sun, and on the following morning he was much better, without temperature, pains or nausea. He was keen to take a walk, so we decided to make a courtesy visit to Sheik Serag Mohammed Kamil, Governor of all Dahlak.

I have already mentioned the Sheik in connection with Nasi's house. He kept residence in the village of Gembeli and not in the capital of Dahlak Kebir. This was because Gembeli was but an hour's walk from Mersa Nasi, the only landing point on the island, whereas the capital had been cut off from sea communication by the growth of cyclopean shelves of madreporite right in front of the city at the old landing point.

Accompanied by our inseparable Tesfankièl, we reached Gembeli at 10 a.m. I took presents with me for women and girls—necklaces, ear-rings, bracelets and various trifles of cheap jewellery which make up the out-dated heritage of many women in the west, especially my wife and my mother-in-law.

The thousand and more inhabitants of Dahlak Kebir are all fervent Mohammedans and almost all fishermen. They know nothing of agriculture (which is impossible anyway) and they know nothing about industry. They live in nine very old villages that have sprung up here and there apparently by sheer accident, since they are not near patches of vegetation, oases or water-holes, nor are they near the inlet of some landing point, but bang in the middle of the desert or on the edge of some impossible stretch of coast. The reason for this dispersion is probably to be found in the raiding of the old Abyssinian pirates. Until the sixteenth century Dahlak Kebir enjoyed the benefits of an independent sultan, evidence of which is to be found inscribed in Cufic lettering on tomb-stones now lying abandoned in the desert.

Three-quarters of Gembeli has been destroyed. Plaster walls stand crumbling, stone houses have been dismantled, the roofs and all the fixtures have disappeared and as you walk through the solitary streets, your footsteps echo and a hundred eyes watch you from the darkness of open doors and windows.

The mortality rate among these people is high, poverty is acute and building materials are scarce, the small quarry at Mersa Nasi being the only one in the islands. When, therefore, a family has been devoured by the desert and misery, its house is dismantled by the rest of the community. Stone, fixtures and anything else that might enrich the houses of the survivors is carried off. Three-quarters of each

village is like a cemetery, but the village goes on growing and shifting like the coral. It grows on top of its dead.

Our arrival in Gembeli was accordingly rather disturbing. Tesfankièl went ahead to find the living stretch of the village while Gigi and I looked around the strange and impressive ruins, some of them suggesting a much higher civilization than the present one. Buildings of two floors were not uncommon, and one could still see traces of pink colouring. The roads were wide and intercrossing, with signs of paving. At one of the cross-roads, I almost bumped into the first human being we met, who was approaching from the side. She was young and beautiful, but on seeing me she let out a yell, covered her face with her red cloak and rushed back in the direction she had been coming from, looking back every so often to make sure that she had really seen the white devil in person. My conciliatory gestures, my bows and my words were useless. She just went faster and at the corner disappeared. I never saw her again.

Finally we reached the residence of the Governor. This consisted of one large room built obviously from ex-army prefabricated material. It also did duty as a school for the eight children in the village, as a court for the entire island, as a temporary prison, town hall, private office and reception hall for the Governor.

Sheik Serag welcomed us with respect and authority. He was extremely kind and, I would say, a perfect gentleman. In appearance he was maturely solid, with a big, friendly face and lively, expressive eyes. He was surrounded by the school-teacher, the civil guard (who rushed to put on his uniform—a jacket) and the men, numbering less than ten, who happened to be at Gembeli. Then he sat on one of the school forms (much to the delight of the children, who, like children the world over, showed their pleasure at stopping school) and

invited us to do the same. Then he talked to us in good Italian and offered us, in accordance with Arabic custom, two big cups of coffee with ginger and then, immediately after this, perhaps to put out the fire within, two cups of rather violent but excellent tea. All this time Tesfankièl remained standing behind us, with the deeply satisfied air of a butler to an important personage. From time to time he glanced smugly at the other negroes and I am sure that Tesfankièl that morning was the most envied man on earth.

Sheik Serag presided over the problems of the island with a fine understanding of the administration of and need for justice, proving at the same time that he knew how to apply the fundamental principles of his old Italian code of law. He was the only administrator of justice and was consulted and esteemed everywhere. It was said that in the fifty years he had been living and during the twenty years he had been governor of the people he had never made a false judgment. He was well-disposed towards Italians.

Towards the end of our visit he introduced us to his youngest daughter, Khadigiah (the same name as the wife of Mahomet). She was three years old, a beautiful creature, with an almost fair skin, and was the offspring of Serag's youngest wife (probably Arab). She was dragged in by a man who may have been the house-servant. She screamed and scratched as if she had ten pairs of lungs and ten cats on her chest. Her father succeeded, although not completely, in calming her. Since all the others were laughing we asked what was wrong. Sheik Serag explained, as he caressed her, that she believed in the old wives' tales of the village, that white men cut the ears off black children. Gigi and I felt rather upset at being charged with such intentions, if only by a child. It was so strange being taken for savages in a place like Gembeli.

But Tesfankièl had a good idea. 'Mr Gianni,' he growled into my ear, 'give little girl beads.' The idea seemed excellent so I pulled a string of green beads from my pocket. Khadigiah looked wonderingly at them, and through her tears I thought I saw that unmistakable flash in the eye which is the first sign of feminine covetousness. She looked at the necklace, swallowed and wiped her eyes. Finally she put out her hand . . . She was soon on my knee, completely happy, and covered with beads, ear-rings and pins of different kinds. I had become her best friend, her 'fiancé' as she bluntly said. Then she disappeared to break the news to all the children in the village. They would come too because white men did not cut children's ears off at all. When we left, the governor's little daughter wanted to embrace me passionately and she cried desperately. But once again, her father managed (only just) to calm her.

On the following day, Sheik Serag Mohammed Kamil sent a servant along to Nasi's house with a sucking goat and two other gifts; for Gigi a *sef-i*, a bread mat woven from fibre with brightly coloured designs, and for me a magnificent breakfast mat, an *inebli-kursi*, also made of coloured fibres. Tesfankièl attended to the goat because both Gigi and I refused to slaughter it. We invited two of the negroes from the quarry to come and eat with us and because they were Mohammedans and could not eat meat slaughtered by the heathen, Tesfankièl gave them the gully-knife to carry out the slaughter. They stretched the goat outside with its muzzle towards Mecca, according to the ritual, and after various invocations to almighty Allah slit its throat in good faith and holy tranquillity.

That night, Tesfankièl raked out a handful of berbere, the African red pepper, beside which paprika is like semolina for sufferers from gastric ulcer, and prepared one of his

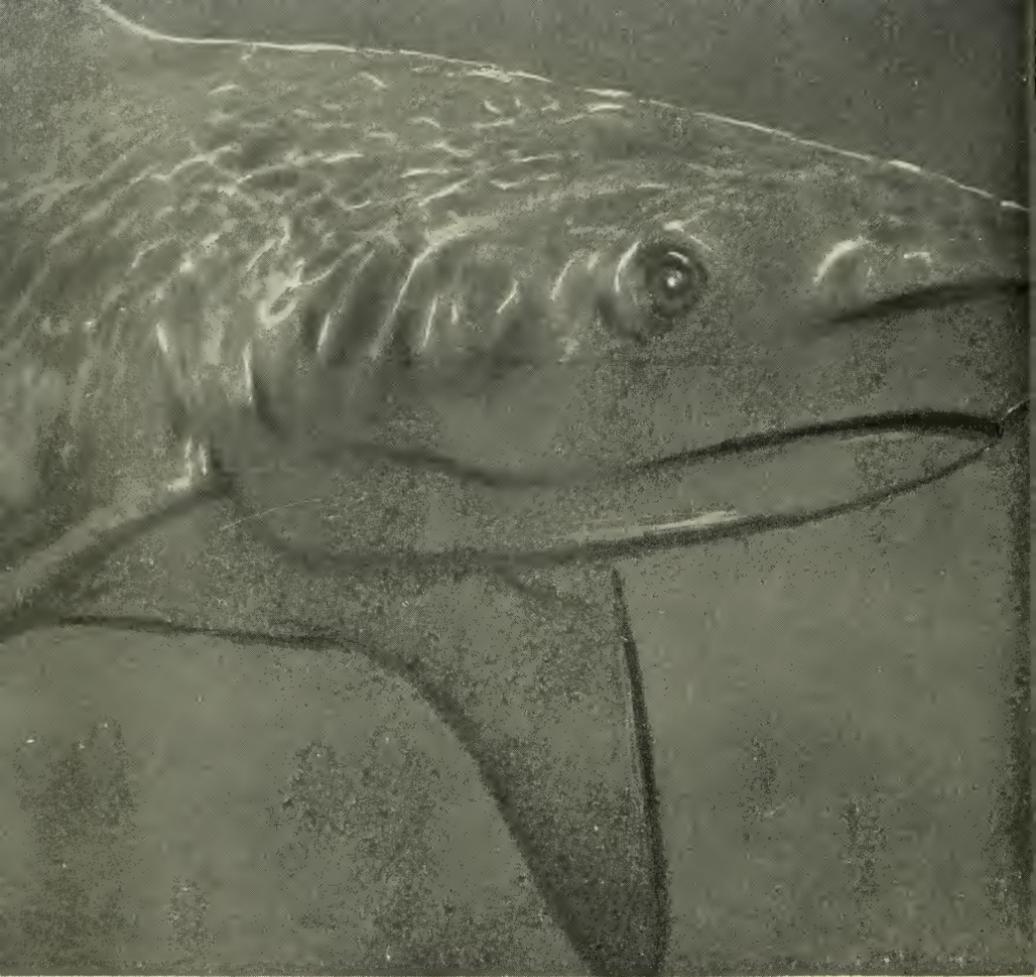
culinary triumphs 'a la zighini', a well-known Eritrean meat dish. It was excellent, exquisite, extraordinary, but we felt we were dying from thistling by hundreds of devils let loose in our guts. The three black boys assured us that they had given us a completely 'insipid' portion and proved it by putting generous helpings of that infernal scarlet powder directly into their mouths.



16. In open sea the Formica fell in with pilot whales. Baschieri, Vailati, Quilici and Ravelli, without wasting a second, leaped in to meet and photograph them under water. Beneath Quilici, separated from the others, there passed a twelve-foot shark.

17. Here is the famous 'rhinoceros'. Stuart follows, as it shivers along the bottom, almost moribund. An instant later it lies dead on its side on the corals. Look at its extraordinary anatomy.





18. Sharks swam up silently, like ghosts. One turned round in a flash, having sensed something abnormal, and so it was that Ravelli got this photograph of a shark surprisingly close. It was another large black-fin, and at a distance of only two yards. He became shy at the last minute and moved off (perhaps it was Ravelli's lucky moment).



19. The strange-looking but common guitar-fish often goes 'muzzling' in the sand of shallow water for shells and crustaceous animals. It is strong but quite harmless.

20. After nearly two months of trying hard to do so, we managed to catch the so-called 'cef-alone'. In the background of this photograph a part of the island of Entedebir is visible.



21. The 'cefalone' has the slenderest of tails, reduced fins, and a tapering body, yet relatively it is the strongest fish in the Red Sea. Notice the hood that encases its head.





22. *Up to the present this is the only photograph taken of the 'cefalone' in its own element, and shows how the fish swims just below the surface.*

CHAPTER 8

*THE MANTA, THE GOOD DEVIL
OF THE RED SEA*

CERTAIN fish, as we have seen, have without justification acquired a terrible reputation. And the most terrible reputation has, with the least justification, been acquired by the manta. The manta has been the subject of more ballyhoo than any other fish; there are even film shots (oh, those films!) of a manta charging a man like a bull. The manta has, in short, been styled the Devil of the Seas.

The manta (Spanish—mantle, from the shape of the fish) is a selachian that feeds on plankton and small fish, and has in consequence minute, innocuous teeth. The 'horns' at the side of its mouth are not used for attacking but rather as spatula, to spoon into the banks of plankton. Cecco, Gigi and I fully observed this operation. The cephalic lobes (a more accurate and unassuming name than 'horns') collect the nutriment with a regular movement and push it into the open fauces. Plankton is thick near the surface and that is why the manta often floats up from below, in contrast with other rays and stingrays of similar anatomical structure. Even when it is harpooned the manta does not attack and certainly never 'charges' man. It nearly always swims off and evidently does not consider man worth a second glance. A manta might be dangerous only if it were of large dimensions and were

brought in a wounded state near the boat. It could damage the vessel, or fill it with water, or overturn it. But then it would no longer be the manta but the sharks cruising by that would spell danger.

The manta is an agreeable monster and not at all horrible or diabolic. It just wants to live and let live. It neither molests nor attacks, and swallows only microscopic shrimps and crabs. But it has a frightening aspect. Not everyone would find it easy to keep cool when confronted with a great beast twenty feet across, with a five-foot mouth, and weighing a ton or more, which has a way of springing out of the water and landing flat again on the surface with the crack of a gun.

*

I went down to the beach near Nasi's house with Gigi. We got the boat ready and went south to the islet of Medecheri. It was a splendid day, eight in the morning and the sun already hot, burning and choking the land. The sea, a deep, wonderful blue, was apparently still, but under the shimmering silk surface the current flowed strong. There was a muted sound of swishing underwater currents.

We sailed on the current (with the engine going) as if on a toboggan. Gigi was back in the stern and I was on the look-out in the prow. Suddenly I caught sight of a continuous churning, like the main stream of a river, half a mile from the right angle of the channel on the right bank. Gigi reduced speed. I strained my eyes and held my breath. The sea appeared to shrink into a streak about half a mile long but not more than three or four yards wide, wavy and rippling. It seemed that a sea Leviathan must be crawling and twisting under the water. The scales on its back glittered here and there. Gigi stopped the engine and we reached the

rippling streak by the force of momentum. Gigi left the tiller, came up to me and looked over the side, stupefied. The streak opened out in front of the boat and joined again behind it. Our faces were almost in the water as we tried to account for the moving streak of blue. Then, at one stroke and with a cry in unison, we realized what it was. Tens, hundreds and perhaps thousands of 'cefaloni', those fish with the clear fins, were swimming in long patrols against the current, pressed one against the other. Not one of them deviated from their three-dimensional route. Sliding swiftly along at a hand's depth below the surface, they produced the effect of a sea serpent. The scales of the fictitious monster which glittered like metal in the sun were the shoulders and heads of these great travelling fish. Our boat rocked in the middle of this living river. Then they passed us, to the right and left, making for the coast. But why? What was happening? What were they doing in so many hundreds when up till now we had seen them only in small groups of one or two?

Gigi and I frantically prepared to go into the water with our guns. Who was going to stay in the boat? We stared at each other. Neither wanted to give in. Very well then . . . heads or tails? . . . I won. Gigi helped me to put the fins on and load the gun. At the same time he loaded me with advice on strategy and tactics and worked out a complete plan of campaign, all in a few seconds. He then sat silent and dejected by the tiller. We were in about thirty-five feet of water and I had already got my legs in. Sharks? It did not matter. Those cefaloni must be caught. I dropped into the water and looked around. There was an unexpected silence. I was in another world. Gigi did not exist any more, nor the boat. The water seeped into my ears. Everything was silent, blue, immobile, liquid. Below was the distant sandy bottom. It was clear and touched with gold. But what about

the cefaloni? Where had they got to? Disappeared. Disappeared? Looking up I saw Gigi shouting and gesticulating. 'Yes! Over there! Move yourself!' Gigi almost stopped me while he rowed there himself. I caught up with him, complaining. I did not want to be left alone in the middle of this sea. Protesting I reached out for the bows.

'A manta!' Gigi yelled.

'Where?'

'It's too late. It was coming towards us; it did a turn and now it's making for the island. Get aboard. Quick.'

I climbed in unwillingly, grumbling 'To hell with the manta' as I took off my mask and fins. Gigi was at the tiller and turned a deaf ear to my complaints. Then he spied a speck on the horizon, and, quicker than I can say, sprang up, threw on fins, mask and gloves, loaded the gun and flung himself into the water. At the same moment I saw the back of the manta emerging like a hippopotamus ten yards from the bows. The water was draining down its flanks. We were still a good way off. Gigi went under and I prayed the gods that everything would go well. Automatically I put my mask and fins on and waited with bated breath . . . The manta, majestic and solemn, tipped over to one side and slowly raised all of its enormous black wing out of the water, flapped it menacingly, rolled over like a plane and whirled down to the bottom. Gigi reappeared for air shaking an angry fist and got back on board. But now I had caught manta fever too. I held on to the tiller, telling Gigi to stay in the bows and keep his eyes skinned. . . .

By 10.30 a.m. I had brought Gigi up to the manta three times, and three times he had missed it, firing from the boat. It was useless to try to catch it in the water. The manta always managed to swerve in time. Now it had disappeared.

At 10.40 the manta unexpectedly showed up and appeared

to be heading madly at us. Gigi stood up and got ready to shoot. The manta struck the boat with a tremendous blow. Gigi rolled from bows to stern. Fortunately the gun did not go off. The boat rocked madly. When the storm had passed, we made a check-up. Everything was all right. We changed positions. Gigi felt his back, but said nothing. His face looked like thunder.

At 11.10 we spotted the manta again. Gigi moved the tiller. We were on top of it. It was a great beast measuring nine feet across. We got a perfect view of it out of the water. Had the bell tolled? The manta gave a crack of its wings and inflated on the surface. I fired the steel arrow plumb in the middle of its back and about six inches deep. Gigi shrieked in triumph, threw over the float (the rubber inner tube) while the manta set off like a torpedo-boat in the direction of Ghubbet Mus Nefit. The cord linking the arrow to the float untwisted like lightning for the length of its twenty-five yards. The float splashed off, rearing like a motor boat behind the dashing monster. With throttle wide open we followed relentlessly.

At 11.30 we were still following. We came into Ghubbet Mus Nefit flat out, into a wild circus of cefaloni and mantas of all sizes. Our victim had brought us into a two-party gathering. The sea around us was a frantic whirlpool of fins and splashing waters, of emerging and submerging tails and thundering black backs. The cefaloni covered at least half a square mile of tumultuous sea while the mantas swam in the middle of this, riding and circling round us. One of them exploded a yard out of the water and landed flat again, throwing up waves and water-spouts. Doggedly we continued the chase. The sun was wicked now. We were sweating like pigs and the motor was red-hot. Our little life-belt of a float looked lost in the great bay and was slipping further away

from us at every yard. The manta must be doing double our speed. Still we followed bent double to reduce resistance.

At 12.30 we were floating immobile on an immobile sea. The petrol had given out and the little life-belt had disappeared over the horizon.

We rowed to the small island of Medecheri, and climbed up to the rocky summit over spikes and fossil shells which made our bare feet bleed. From the summit, about 120 feet above sea level, we scanned in detail the sea around the island. It was swarming with beasts. Multitudes of silver cefaloni and black mantas covered the surface and filled the depths. A great stretch of the sea around the island appeared to be regurgitating thousands of maddened fish. Further away, the sea returned quite clearly to a flat normal calm. What was happening? What was the reason for the association of these two species of fish?

Suddenly, at about 1.30 p.m., we caught sight of the float. It was a minute speck and too small for our eyes, good as they were. It came and went with the metallic movement of the sea, appearing and disappearing on this great aluminium plate under the sun. Then it disappeared for good.

After rowing for an hour and a half against the current, one of the worst one and a half hours we had ever experienced in our lives, under a sun which dried up every drop of liquid inside us—saliva, the tears of blinded eyes, blood—to make into dripping sweat, after this atrocious hour and a half we reached Nasi's house. It was 3 p.m. We anchored the boat near the beach, and sat down in the water worn out, to eat a ship's biscuit and half a tin of meat each. Small fish came around picking up the crumbs near our legs, our lips and armpits, nipping our skin. We were sweating even in the water and it was useless to stay there. We filled up the petrol tank and took on all the reserves; we modified the spear-gun

—no more flimsy floats, but a line as thick as a finger connecting the arrow directly to the bows of the boat—and left again for the island.

At 4 p.m. we were still in the waters of Medecheri with the boat dancing about as if it had been bitten by a tarantula. What a scene! What had happened before this moment was nothing by comparison. The events of the day had been working up to a great finale. The appointment, on this torrid African afternoon at the island of Medecheri and in the wide bay of the Channel of Nocra, of thousands of cefaloni and dozens of mantas was a gargantuan marine banquet, and since we were in the middle of the honeymoon season of the oceanic creatures, it was also a wedding banquet. The mantas and the cefaloni had interrupted their love-making to pounce upon the latest gastronomic surfeit. The males gobbled the plankton to rebuild the muscles in their tails and sides. The females gobbled it to feed the eggs and offspring in their bellies. But there was plenty for all. The sea is big and the plankton is as thick as soup, covering the sea with a heavy stinging awning. Now we understood the mystery of the cefaloni. They, too, eat plankton, possibly plankton alone. The boat ploughed through the foaming hordes of cefaloni and they passed us with their curious silver heads just under the surface, their mouths wide open, guzzling up the soup. They looked at us with enormous round eyes. The mantas unexpectedly zig-zagged across our course, sending up great waves. Gigi was standing in the bows with the gun while I controlled the boat as well as I could. Suddenly the cefaloni made for an approaching tank. A giant manta, as black as death, was heading straight at us over the waves. It lifted the tips of its wings quickly and rhythmically. Three boats like ours could pass between them. The tips resembled the triangular fins of sharks in pairs. It

is probably because of this association that they are intimidating. It did not run into us, but turned aside at five yards, swelling half out of the water just avoiding ditching Gigi with its back-wash.

At 4.30 p.m. a masterstroke from Gigi sent the arrow full into the belly of a manta weighing at least four hundred-weight. He caught it just at the right moment as it turned two yards in front of the bows to avoid our charge. Like its counterpart of the morning, the manta set out for Ghubbet Mus Nefit dragging us behind. The engine was going flat out, but it might just as well have not existed for the speed of the manta far outstripped it. The propeller was spinning in a vacuum and we were travelling at not less than ten knots, huddled in the stern to prevent the bows from going under. The line was as tight as a bowstring.

At 4.31 p.m. the line snapped. It could resist no longer. We seemed to have come to a dead end although the engine was still carrying bravely on . . . we sat down without speaking. It was all over. I shut off the petrol and lit a cigarette for Gigi and myself, feeling rather weary. Perhaps it was the sun. Perhaps the mantas. We were right out of luck to-day. Gigi felt the leg that was hurting him.

At 5 p.m. we were back again in the eighth circle of hell, giddy and incapable of viewing with detachment one of the most amazing marine events that man could ever have witnessed. Mechanically, I went through the ritual of entering the water, and swam away from the boat. What was the use of the gun? Swarms of cefaloni in serried rank surrounded me, passing close by at high speed, agitated—though not by me—obsessed with a mania for dashing to the left and right in continuous acceleration. A great shark went by, but it had little effect on me and I none on it. How many cefaloni I saw in that half hour I shall never

begin to know. Imagine a horizontal cloudburst of fish like stainless steel each measuring more than a yard in length. I do not even know how many times I uselessly took aim, sometimes coming up to the surface, sometimes a yard below, sometimes chasing them. Everything seemed to be taking place in a yellow fog as the plankton absorbed and dispersed the light. The fish came into view at ten yards from all directions, unexpectedly and explosively. A shark could appear in the same way and here I was on the surface, nonplussed and with my reactions slowed down to a standstill. Then I realized why I felt so out of sorts. The whole of my body was burning and itching, and getting unbearable. The plankton had got me. It has irritating properties, and as it was thicker than ever near the surface, it stuck on to my lips. They swelled up painfully, and then were splattered full on with something so burning hot that for a moment I could neither shout nor swallow. Unable to stand it I swam back to Gigi and got back into the boat where I lay prostrate.

Gigi too went through the ritual, swimming among the cefaloni and vainly trying to get one. He met two mantas underwater, and with his heart in his mouth, pursued them, but in vain. It was six o'clock in the evening. The sea was still. I smoked my fourth cigarette and looked towards the west. The sun was setting in a green light. The mantas, the black phantoms, had stolen away one by one. The plankton had thinned out. Some of it had been eaten but most of it was being dispersed by the evening currents. The elusive cefaloni were splashing about here and there, but they were part of the rearguard. The sea was finding its peace. I could feel my nervousness relaxing little by little as the sun got greener, the sky a deeper blue and the surface of the sea became sombre and still.

At 6.15 Gigi gave a yell. I sprang round. He was ten yards

from the rocks of Medecheri in about four feet of water holding on to and dragging something powerful that was trying to get away. I reached him in a flash, snatched the gun from him and took over. Gigi jumped into the boat and started rowing off.

'What is it?' I shouted.

'A ray.'

'How much line have you?'

'Twenty yards.'

The beast was invisible down there in the shadows. I pulled it gently to try its strength. It felt pretty powerful. The line was right out. I must hang on at all costs. I dug my heels in and the fish stopped. We remained stationary. Gigi stared from the bows and held his breath. Either the line must snap or the fish must give in or I must snap. The fish gave in. I could feel it yielding. I drew the line in slowly yard by yard. Would the fish surprise us? I held myself at the ready. Gigi's eyes were popping out of his head. When I had got it to the surface I hurriedly tied the line to the rowlock. It was a prisoner now, a strange horrible monster, yellow brown and covered with pink and purple spots, its skin wrinkled, its eyes projecting and squinting.

'Look!' Gigi cried, pointing to the tail. It was long and thick like a python, with a sort of spatula at the end of it, but what was disturbing was that the tail was turned up and the poisonous tip of jagged bone was stuck in the back, almost up to the hilt. The legend is that the stingray kills himself with this mortal weapon when he cannot escape from his enemy. Reality is more prosaic. When it was struggling to get free from the line it probably struck out at the imaginary foe and ended by wounding and poisoning itself. That no doubt was why our victim appeared suddenly to give in. We hauled it on board. It weighed about eighty pounds.

Now it was dark. We looked at each other in silence as we chugged back to the house, engine humming. The sea was phosphorescent, our eyes were bright and the stars were twinkling in the not yet black sky. Were you really convinced, Gigi, I whispered to the waves of Nocra's Channel, that your ray did not commit suicide in the tragic solitude of the sea floor?

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The *Formica* had returned from its visit to Massawa, with Cecco and Priscilla. The morning after we left for Medecheri to conquer the manta, armed with a hand harpoon, spear-guns, the 22, the repaired Browning as well as a 16 mm. ciné camera with colour films. The sight of the day before was not repeated. The cefaloni and the mantas came back to splash around the waters of the bay at the same time as the day before, but in greatly reduced numbers. Even so, it was enough to fire the enthusiasm of Cecco and draw a hundred 'my goodnesses' from Priscilla. We threw a bomb into the middle of a thick shoal of cefaloni but not one of those accursed beasts was killed. Perhaps the bombs exploded too far down. When the foam came up we rushed to the spot shouting 'Victory!' but were greeted by ten minute fish only. What metal are cefaloni made of?

The mantas came later. About ten came flapping darkly under the keel. Each of us had three shots with the hand harpoon. Gigi missed three, I missed three, Cecco missed two and at the third shot caught one in the wing. It was one of the smallest of them. The battle lasted half an hour and ended with a bullet fired at point blank range. I managed to shoot some of the more exciting moments with my camera. Finally, we dragged our 'sea devil' aboard. He weighed

about two hundredweight and as he lay flopped on the planks, occupying the whole boat, we exchanged satisfied glances. Now that was done.

CHAPTER 9

CUNDABILU

TWO days were enough to know everything about Cundabilu. But they were unforgettable days, days whose every minute remains indelible in our minds. On the little island of Cundabilu we experienced for the first time the thrill of the coral reef submerged at high tide and open to all the winds, waves, currents, fish and animals of the ocean. Dissei was the sentinel over a great gulf. Cundabilu rose microscopically from the middle of the sea, the charming little peak of an isolated mountain of coral.

To the south, a long, blindingly white beach swept round in an arc and slipped gently down into the sea. After a hundred yards it reached a depth of nine or ten feet. Here the coral unexpectedly barred the way and came out here and there on the surface for about twenty yards, then suddenly, like a petrified forest on the edge of a ravine, it plunged into the blue-green of a deep sandy floor.

This was the zone of the greatest interest, particularly towards the south-west, at the furthest point of the coral barrier. On the opposite side, to the north, there was no beach or barrier; a narrow flat platform plunged sharply down into the dark shadows, the mere sight of which aroused in us a certain apprehension. Heaven alone knew what monster might lurk in that gloom. The waters on the north side were populated almost exclusively by sharks (Gigi saw

one about twelve feet long a couple of strokes off, but it cleared off silently) and the life was certainly nothing like the stupendous, unimaginable turmoil which abounded on the southern barrier, continuously steeped in sun and light as it was, and nourished without doubt, by a constant vivifying marine current.

On the southern barrier, or more accurately, inside, above and below the southern barrier reef we encountered several new species of fish, new at any rate for Italian museums and institutes.

The fish passing by were more or less the usual ones—pampano, bream, kingfish, tunny, sharks, barracuda, etc.—but the waters were extremely rich in coral fish. There were *Scaridae*, coloured green and scarlet with a yellow snout; *Labridae* with slender, pointed fins, crazy colours and horizontally striped mouths; rainbow *Labridae* and *Labridae* all of one colour but subtly shaded; butterfly fish, the most fantastic of tropical fish; groupers in every hole, flying scorpion fish, porcupine and puffer fish, box fish and morays, trigger fish, diagrams, surgeon fish and snappers and hundreds upon hundreds of others long, short, tapered and thick-set, armoured and naked, vagabond and sedentary. It was a flourishing, democratic community where everyone minded his own business without harming his neighbour, and except for the big plunderers, grazed mostly on what the reef offered with open arms. In fact, as could be seen close up, the reef was swarming with thousands of small animals—crabs, prawns, molluscs and pipe-fish—and living anemone flowers, sponges of an infinite variety, new kinds of madre-pore coronets, delicate spirographs, thin tubes with evanescent flowers on top which withdrew as soon as they had bloomed. . . . You could spend a thousand spellbound hours on the reef.

The first fish to greet me at Cundabilu was the celebrated, illustrious pilot fish, the one, so they say, that 'pilots' the shark. I noticed it gliding past my nose as I was surveying the sea bottom from the surface. It was as long as my hand. It recalled the strange experience that Silverio had had with a pilot fish some days before. The pilot fish had behaved with Silverio as it behaves with whales, wagging its tail in front of him wherever he went, without leaving him for one moment. Silverio pretended to ignore it, but this finned guide remained stuck to the glass of his mask for almost an hour, until Silverio, who had become quite cock-eyed and was on the verge of going crazy, had to leave the water.

Now why does the pilot fish remain in front of so many selaceans, including mantas and even the biggest grouper? Several reasons have been suggested, but none of them is entirely convincing. It is absurd to imagine that the pilot fish can really guide sharks to their prey, because when the shark is attacking, it is so much faster than the pilot fish that it would leave it hundreds of yards behind. It requires a further stretch of the imagination to accept the theory that the pilot follows the shark to 'pick up the crumbs'. They say that the shark slices and swallows. It does not therefore leave crumbs, but only the tail stump and some blood. And what would a pilot fish get from a manta which swallows, without biting, a diet of plankton and microscopic organisms? There are others who suppose that the pilot fish follows big sharks to gain protection from its personal enemies. To this it may be said that a hare has never been known to seek protection from a fox near the claws of a wolf. On the other hand it has been observed that this enigmatic character behaves with boats and small sailing ships, wrecks and drift-floats in the same way as it behaves with sharks. Could it be seeking shade from the sun? Our direct experience disproves this theory.

When the fish was 'piloting' us it never tried to stay in our shadow. The mystery remains.

Now to get back to my pilot. It plonked itself in front of the glass of my mask with a lightning swish as if it wanted to catch me by surprise. And it stayed there. It stayed there for at least an hour, and in that hour I found myself at close quarters with three sharks, all of whom looked quite hungry for my pilot. He however, was evidently quite satisfied with my company (after all escorting a fish of that class was not an everyday event) and he did not move an inch. In that hour I made twenty dives, and in going down and coming up the pilot remained right near my mask. I reached a point when I could stand it no longer. I made my first attempts at catching it without success, then I got mad and lashed out with my fists. I tried shooting, grabbing it, biting its back, spitting on it—no effect. Happy, imperturbable and as tenacious as a flea, the cursed beast would not leave me. Finally, with a shout of indignation, I went back on board. The pilot watched me from below, dumbfounded. Then he went off, and I swear I saw him shake his head in consternation.

The pilot fish officially demonstrated with Gigi and Silverio, as well as with me, that, for him, we men are fish. And since the pilot fish cannot be singled out as a fish with original ideas, it is fairly certain that we were fish to other fish too. This is a deduction that should not be ignored, since it is only in the light of this that we can explain the attitude of certain dangerous marine animals towards us. Obviously they took us for fish they had never seen before, curious fish to be treated with suspicion. The diffidence and all the other reactions we observed, especially in the case of sharks, take on a new significance when seen in this light.

I was alone outside the southern reef. The vertical visibility was about thirty feet, which is good for the southern Red Sea. Beyond the crown of madrepora the sandy bottom went steeply and evenly down into the blue-green depths of the open sea. Suddenly I saw a shark arriving half-way down. It was quite big (about six feet long, but three times as round and fat as the usual black-fins) and I took it for a dusky shark or its cousin, a type, therefore, to avoid. The great beast pointed its snout towards me very slowly. I took a deep breath and went under. The gun was loaded so I waited quietly in one spot. About five or six yards away the shark turned towards me, then passed in front of me without paying me any attention, and made straight for the reef. I followed it softly and quietly to see what it would do, keeping my distance. It stopped its gentle progress and I found myself at its back not more than four yards away. 'If I only had my camera with me,' I thought holding my breath. Then an extraordinary thing happened. A fish of not more than six ounces, one of the thousands of striped holocanthus, sprang determinedly and angrily out from the reef. It propelled itself with all the force of its tail and fins against the snout of the great beast. In other words when it found itself at the right distance it did exactly what all other fish do, and what some terrestrial animals do, too, to chase another off—it punched him with its nose. The shark cowardly turned his back, went off as fast as he could and did not show up again.

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Sharks were 'at home' at Cundabilu. The first time the swimmers of the *Formica* went under there and exploded a bomb, they came in dozens. There were great blue sharks about twelve feet long as well as a brute of about sixteen feet

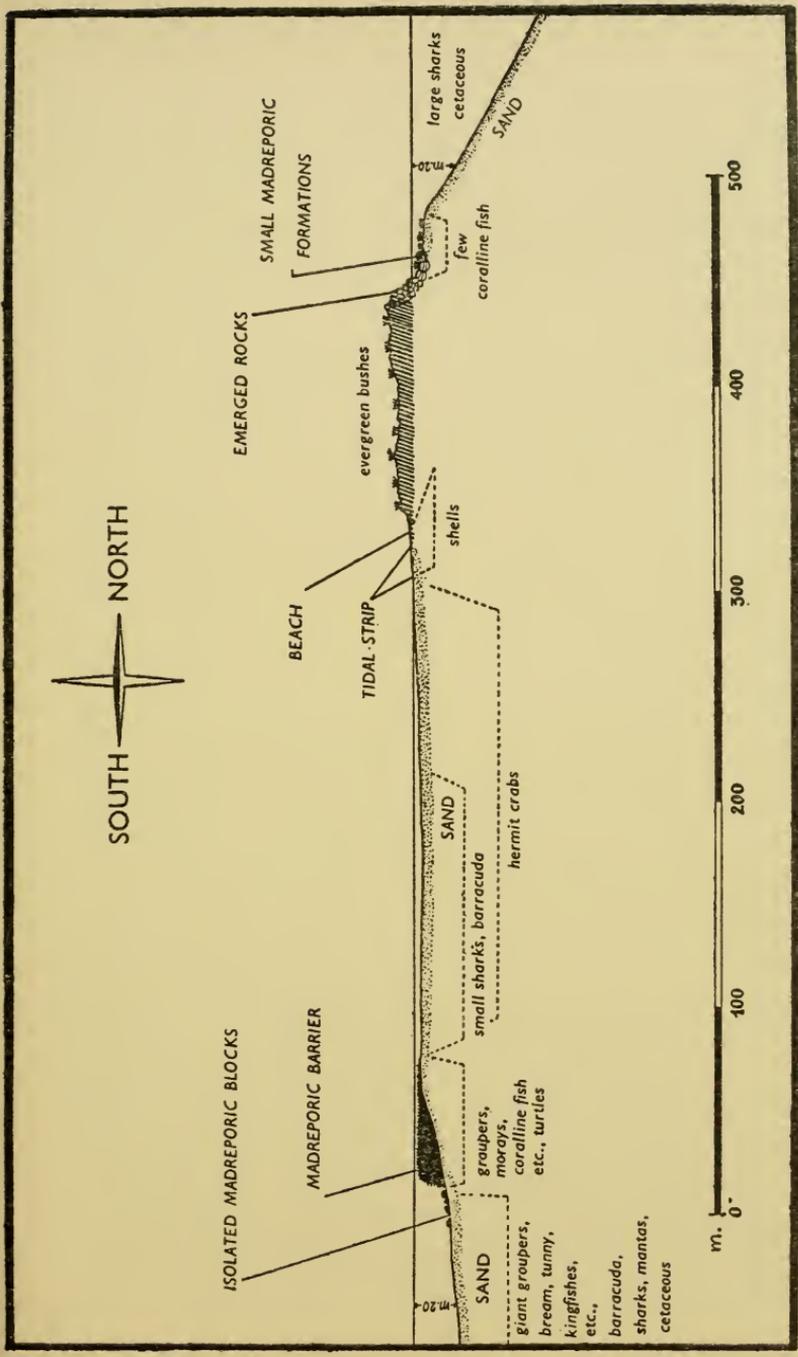
with the suspicious grin of a real 'tiger'. This time they were not so shy; they were, on the contrary, intrusively arrogant, especially the blue sharks. Vailati rubbed his hands with great satisfaction when he told about it at Mersa Nasi: 'Once they come, they don't just go off again. They stay and buzz around . . .' The silent comment on Tesfankièl's face seemed to be: 'If you're not nuts . . .'

There were plenty of sharks, especially on the other side of the reef. Going under with Gigi I came across a big travelling saurus. I wanted to try a flying shot and hit the middle of its silvery yellow body. Flash—and there were five black-fins on the spot making grabs at the fish, retiring in fear, then coming back again. . . . It was always the same story. We only had to plug a 'white fish' to bring at least a pair of sharks into the neighbourhood. On the following day, however, we noticed a complete change in the situation. The sharks kept coming from early morning. Then later, in spite of the continued killings, which we intensified just to enable us to photograph the sharks, they made no more appearances. We were paying the price of not having given them something to eat; evidently they were convinced that there was nothing to be had from those arrogant, butchering monsters.

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But if the sharks were no longer enticed to the fish we killed, we did manage to entice a grouper.

Gigi went down about thirty feet on the open side of the reef. He hit a twelve pound grouper which thereupon took refuge in its hole. Leaving my gun on the sand I went down to pull, but it did not come out. We went up for air and then down again. As I got hold of the arrow which was sticking out of the hole, Gigi nudged me and pointed to something behind. His face behind the glass of the mask was tense with



Section of the Island and sea bed of Cundabulu

The sea bed surrounding almost all the islands of the archipelago follows this pattern: on one side it extends in a shallow sandy terrace, while on the other it falls rapidly away. At a distance of five hundred yards from the island of Cundabulu, we have to the South, a depth of about 60 feet and, to the North, about 360 feet. The sea-bed at 60-70 feet extends south of Cundabulu for a mile, then drops suddenly to 250 feet. Note the difference between the madreporic formations and the fauna found on the two sides of the island. The more common marine animals have been indicated in the zones that they frequent. The presence of all the animals indicated has been confirmed on the spot.

(DIAGRAM BY G. ROGHI)

excitement. I sprang round. There, at half depth, as if suspended in the blue, seven sharks were watching us; in the middle of them was an enormous grouper. We looked at each other terrified. Trembling, I collected my loaded gun, and we floated up without making a sign. The grouper remained where it was, gently waving its tail. The seven sharks disappeared.

A quick conference on top. Looking below again we saw three more black-fin sharks in the company of the grouper; compared with her they looked spindly, although they were perhaps twice as long. The grouper moved all of a piece, like an engine on a turntable. Again the sharks disappeared. Council of war. Yes, my gun was pretty powerful, but we really needed the much more powerful one of Raimondo, designed by himself. Where was Raimondo? Fishing over there. We called him over and he saw the beast, which now started travelling to and fro along the barrier, but twenty-five feet out at half depth. We followed, parallel with it and a little behind. Gigi had left his gun on the bottom near the small grouper gone to ground; I had mine and Raimondo his. We trailed this huge grouper for about half an hour, up and down, down and up, a hundred yards at a time.

Suddenly, without any apparent reason, the grouper went towards the barrier and parked itself halfway up a pinnacle of coral with a hole in the middle. Gigi cornered it and Raimondo and I approached slowly. We got to within six yards. I was in a better position than Raimondo, since I could see the gill shields of the creature through the hole in the pinnacle, while it could not see me. It seemed worried about Raimondo who was approaching more openly. Anyway, I remained still, leaving my companion to it, ready to help if needed. Moments of agonizing suspense. Raimondo drew closer and closer. He was now eight feet off with his gun

at the ready . . . the grouper turned with a slight dart, moved a length and returned to the open sea still at half depth. But none of us went up. The game was still on and the apnoea (free-air immersion) continued. . . . Gigi and I were still playing statues. Raimondo slowly twisted in pursuit of the grouper . . . it moved imperceptibly away with Raimondo still eight feet off . . . but why didn't he fire? Gigi and I wanted to scream 'Shoot, man!' But Raimondo hesitated. The grouper looked bored, increased its speed slightly, and solemnly made off. It was good-bye. We did not see it again.

Raimondo had not considered that he was at the right killing distance. 'To drill that beast right through,' he said later by way of explaining his hesitation, 'I needed to be nearer. I hoped it would stay still for another second.'

An hour passed with everyone going about his own business. Gigi had gone back to the boat after retrieving his little grouper, and Raimondo was on the beach resting with the others. The boat, full of succulent, harlequinesque lobsters that Gigi, Raimondo and Alberto had caught with their hands that morning, all in a tribe under a rock, was floating in a perfect calm a hundred yards away, with Gigi, Cecco and Priscilla aboard snoozing. I alone was in the water, swimming vertically on the open side of the reef. Shoals of fish were travelling around below. It was past one o'clock and the heat was choking.

And there was the grouper again! I almost swallowed a mouthful with the shock.

It was at the base of its pinnacle. Then it travelled quickly off to a low block of madrepora, little bigger than itself and lying apart from the reef. It made a sharp turn and went in. I came out on top and waved madly to my companions, at the same time looking around for Raimondo's boat. I spied it lying at the bottom of the long beach hauled on to the

sand. My friends arrived on the scene and we conferred. Cecco and Priscilla were in the water in a twinkling and Gigi took the oars. I showed Cecco the hole and set out with one of the most powerful spring guns in the world in my hand. As I was going down, the advice of Cecco and Gigi went round and round in my mind: 'Don't shoot it in the head. The harpoon will bounce off. Fire at the body, or the tail—wherever you like—but not at the head.'

A vertical journey, down, down to the sand at forty feet. I had dropped far off from the hole so as to be able to study the internal situation of the beast as I approached. I advanced flat on the ground, holding up my gun, my stomach lightly scraping the cold sand. Cecco watched me from above and Gigi, from the boat, watched him. At four yards range I got a view inside. The gloomy cavern was filled with the monstrous head of the grouper. Its projecting bovine eyes stared at me questioningly, wickedly—or was it only gormlessly? I moved nearer an inch at a time, thinking frantically: 'If it only shows its head, how can I avoid shooting it there? Its head fills the space completely. How can I hit it broadside on? On the other hand, it might turn, and expose its gills and the lateral nerve centre. Then I could get it cleanly . . .' I closed in inch by inch. A minute had probably passed since I had last taken breath, but I did not notice it. I continued to think frantically: 'This grouper cannot withdraw its head, as ours do back home, because there is no space behind, at least I don't think there is. I wonder if there are any sharks splashing above? Cecco would shout and warn me. Yet I might not hear him. Think about the grouper, idiot. But why doesn't it turn? Quiet, it's moving its fins. . . .' I remained immobile in front of it at a range of four feet, a perfect, an ideal range . . . the beast should turn in a minute . . . perhaps I'll get it clean . . . don't shoot at the skull . . . *but shoot right*

into it, dammit.' Just as if it had understood that last tremendous thought, it exploded like a catapult. I realized in a fraction of a second that it was charging me and I fired blindly, hurling myself instinctively to the left. A 'wind' overturned me and threw me aside and I felt a gigantic, brutally violent body pass over me.

I recovered from that fraction of a second groping around at the bottom of the sea feeling rather lost. The grouper had disappeared. I had failed and had only just escaped leaving my own debris around. I looked up. High above, the shadow of Cecco was gesticulating against the leaden surface. I rose, and only then did I realize how little I had left in my lungs. Cecco and Priscilla had seen everything as from a grandstand and said they understood why I had not fired.

'What a fool I was,' I moaned.

'Why? You did the only thing.' Cecco assured me as we swam together to the boat.

'It was almost in the bag,' I went on.

'Hm . . . but it was longer than you and twice as broad,' said Cecco. 'What a pleasant little fellow it was.'

*

At Cundabilu everyone could find amusement to his own taste. There were fish and adventures for all. We came across giant turtles, impressive barracudas, and great shoals of long blue fish with black tails which crossed through equally heavy shoals of yellow fish. The sea was throbbing with life fifteen feet below us. Gigi had a private argument with an eighteen pound moray, which went back to its hole after being wounded and then returned to the attack on the surface, fortunately only getting hold of the empty gun. Priscilla gathered an enormous quantity of uncommon molluscs and

madrepore. Quilici and Ravelli took some excellent underwater photographs. Raimondo caught a lovely turtle with a shot in the neck, then lost it after photographing it among the coral. I consigned to the formalin two extraordinary, microscopic fish, of a species unknown to us—one belonging to the family of *Holocanthus* and the other to the family of *Balistidae*.

And finally, Cecco had his strangest quarter of an hour line fishing.

We fixed the line to the boat whenever we moved. On the way out we had caught the usual grouper of fourteen pounds. But on the way back, for the entire crossing over an open sea, not one fish was enmeshed. Gigi was holding the line in the stern, rather bored. I was at the tiller, near him, steering the boat to the cliff on the island of Entedebir. We had just arrived, and I was turning the bows for coasting, when something stopped us with a jerk, and started pulling us backwards. The shallop turned round on itself and I took her, with the engine ticking over, to where the line was stuck. We looked overboard and saw that the water was eighteen or twenty feet deep and very clear (it was dusk and at this time the plankton scatters and drifts away). The spot had a Mediterranean aspect, with its big clean rocks, covered here and there with algae. How could the line be caught on such a deep bottom? Gigi tried pulling on all sides and I supported him with manoeuvres with the oar. No result. The hook must be

PLATE 23. (opposite) While we worked hour after hour on the barrier slopes, large and imposing sharks, impelled by infinite curiosity, constantly came up from the deep to have a look. We never succeeded in accepting these little pranks of theirs with a sublime indifference; each time one was put off one's stroke for a second. This specimen, taken by Ravelli, was over twelve feet long.



anchored. After ten minutes, trying we were obliged to decide either to cut the line or to go under and have a look. Naturally, we voted unanimously for the second alternative and Cecco volunteered.

Fins and mask on and Cecco was in the water. For peace of mind we held a loaded gun ready for him in the boat. Cecco swam to the point of the stoppage, had a careful look round, then went under and returned almost immediately in great excitement.

'Give me the big knife,' he said.

'What is it?'

'A smoking shark.'

'Smoking?' But Cecco had gone again.

'He's had a touch of the sun,' Gigi muttered, lighting a cigarette.

Cecco was down a minute or more, but it seemed an hour to us who were waiting, anxiously scanning the water. I was already in mask and fins when Cecco erupted on the surface.

'Pull,' he yelled. Gigi bounced up and started pulling the line, with me helping. Obviously there was an animal attached, fighting to escape. We pulled with all our strength and up it came. Its outline appeared under the keel. We held on and pulled inch by inch until we tore it out of the water. It was a shark. Gigi held it by the mouth with the twisted line and I managed to grip it by the tail. We pressed it against the side of the boat and then with one last flip it was aboard and we sprang to the bows and the stern. It was a black-fin, five and a half feet long, and appeared to want to bite our poor boat to pieces. Then gradually it relaxed, gasped, writhed in its last spasms, and died with a long purple shiver.

Cecco got on board smiling.

'This is a good one,' he said, 'It was smoking blue.'

‘What’s this story?’

‘When I went down the first time I followed the line with my eyes and saw it disappear behind a great mass. In a hole behind this, I thought, there’s the grouper. But at that very moment, I noticed on the right, on the other side of the rock, this gawp, with his snout on the floor, watching me quite still, and smoking. Yes—I tell you—he was smoking. Regular puffs of blue smoke. . . . It took me some time to realize what was happening. This fool had the hook in his mouth and while trying to get free had gone behind the rock. Then he couldn’t move any more and was spitting blood out at every breath. I broke the rock where the line had got stuck with the knife and the shark leapt out like a madman. That’s why I shouted to you to hurry up and get it away from under me. . . .’

CHAPTER 10

GLORY AT ENTEDEBIR

THE island of Entedebir is a twin sister of the island of Enteraia, and these, together with the island of Nocra, almost enclose a vast lagoon which, with the proliferation of the coral, will in time become an internal basin whose sole exit will be a narrow strait to the north between Entedebir and Dahlak Kebir. The lagoon is not very attractive from the ichthyological and biological points of view, but the western sides of the two islands, that is, those open to the sea, contain interesting material.

The coastline of Entedebir is scalloped by two crescent-shaped gulfs with shallow bottoms, framed by dazzling beaches of finest sand, wide open to the sun and populated by myriads of marine birds, from different species of herons to fetonti with red beaks, from seagulls and oyster-catchers to the most colourful creatures of all—the flamingoes, Chinese figures painted with African colours.

We hunted all these birds, with some persistence, until we had captured specimens of every individual species. Our skull collection was notably increased. The most difficult birds to approach were the flamingoes, as every treatise and book on shooting will confirm. But when they took off in flight, the sight was so magnificent that though it represented for us yet another failure we hadn't the heart to curse them.

In fact we stood and watched them, filled with wonder and admiration. Strange, distorted, beautiful creatures, their curved strawberry-ice beaks out of all proportion, their bodies pure white, their huge wings a fiery red edged with black, they are as tall as a youth when they stand on their lanky tottering legs. When they take off, they give a few heavy beats of their wings and are airborne; then the awkward incongruity of their bodies falls into a perfect aerodynamic line, and their thin, round, long, white necks guide the way as if they were arrows shot from some fabulous bow.

Cecco shot one while it was flying away from the beach. The bird dropped with a crash into the sea, opening wide its wings of fire. It was like the shattering of a spell.

*

It was evening. We had been working and messing around in the water since eight o'clock that morning. My three friends had already got into the boat, worn out and sun-drunk, and were coming to pick me up on the west coast of the island. I was alone in a narrow inlet of the gulf further south, strategically hidden behind a block of madrepora, gun in hand, watching and waiting in the turbid water for the expected arrival of a shark in the lagoon. The tide was slowly rising, bringing with it clouds of very fine sand. I had been collecting shell-fish and other boring little animals for hours and hours, and was longing for something more diverting—such as a shot at a guitar fish, or perhaps even a sturdy black-fin.

Then I heard the familiar drone of the outboard-motor. I forgot my shark schemes and placed myself on top of the block which I had been uselessly hiding behind. As I stood

there waiting for the boat, my shoulders were hardly out of the water, but the sea was as friendly and calm as a bath-tub.

I saw the boat come out from behind a rock and make straight for me. My friends had seen me and had turned the bows in my direction. The outboard was chugging merrily. It could not have been more than thirty yards away, when, for no special reason, I took a look underwater (I had not yet taken off my mask). I was just in time to see a shark coming at my legs from the same direction as the boat but at high speed. It must have been six feet long but I only saw the dark brown of a big square head. The incident lasted no more than a fraction of a second. I had not time to make even the slightest reaction. My gun was loaded. I could have fired. I could have jumped to one side. I could have shouted. But I did nothing; seeing the thing advance upon me I was petrified. It was two feet from me when it jerked violently, as if seized with an unexpected terror at meeting me on the road, and flew off at a right angle without touching me.

I swallowed the lump in my throat and got into the boat, feeling myself to make sure I was still in one piece. So the shark had been more afraid than I. Evidently frightened by the droning, vibrating engine which unknowingly followed him, he was seeking refuge in the lagoon when he came up against two horrible, gigantic, white pincers rising to the surface, and that huge, round, dark eye that glared at him pitilessly from above.

*

That day, everything went well. Cecco killed a stupendous white-bellied stork (the fairy-tale kind) and found the nest of a giant heron with three white eggs inside as big as turnips. We caught yet another grouper by line, and Gigi had had a

fight with a decent-sized dusky shark, which only just got away. Priscilla found another new cowrie (new to us, that is) and I caught a black and yellow striped fish not yet in our collection.

Together we discovered a stretch of beach formed exclusively by thousands of colonies of shells, lying three inches deep, and we took specimens. And together we caught other fish and animals of interest. . . . In short, it was one of those days when everything is right. The line did not get tangled, the sparking plugs did not get wet, the sea was not too turbid, the sun was lightly veiled, the tinned meat was not too repulsive and the bottle of mineral water was not left out in the sun.

But the glorious epilogue had to come.

At about 11 a.m. Gigi came upon two corpulent 'cefaloni' a little outside the gulf, south of Entedebir. He warned me and we began the chase together. I saw them again and Gigi who was nearer, struck one full on. But there was the usual maddening follow-up: the line snapped and the cefalone cleared off, leaving Gigi in disgrace.

At about 12.15 p.m. I was swimming gently, gun in hand, at the edge of the short coral reef. The tide was rising and the water was turbid. I scoured the bottom with my eyes, going down every so often, travelling close to the floor or at half-depth in search of something new. At a certain point I noticed a flashing, like a blade, ten yards off. Cautiously I increased my speed, gripped by a strong premonition, and there, just beyond . . . a great, long, luminous, silver fish was sliding along a cleft . . . it was the cefalone. There it was, sliding along the corridor, scraping its body, still carrying Gigi's bent arrow. I dropped on it like a hawk. It darted off, leaving the corridor for the open sea. My arrow nipped it behind the shoulders. I shouted with joy and exploded on to

the surface clasping the victim with all the strength I could muster. Cecco rowed over hurriedly, and seeing the cefalone and me, all but fell on me as he took hold of the two embedded arrows and prepared to drag the beast on board. The cefalone was barely out of my grasp when it came unexpectedly back to life, freed itself with a violent twist and slipped through Cecco's hands. As I reached out to catch it, it drove the end of the arrow-shaft into my right armpit opening a three-inch cut. But just as it was about to get away I caught it in mid-air and hurled it into the boat.

Gigi came swimming rapidly towards us and we were soon all four in the boat with the dead cefalone in the midst of us. We looked at it in silence, almost with a touch of emotion. It was the 21st of February. We had succeeded after a month and a half.

We landed on a beach where we could have a good look at it. The first mystery we unveiled was that of the head of plexiglass. The fish was covered from its gills to its toothless mouth, with a sheath of transparent, glutinous gristle, like a sclerotic, a quarter of an inch thick. Even its eyes were covered. Hence that strangely fixed, glassy expression.

The fish was three feet long and weighed from twelve to sixteen pounds. It was like no other fish we knew. It was something between a tarpon and a mullet, with very hard scales and high slender tail-fins, distantly resembling those of a herring. In relation to its size it was not heavy. We wondered where it got its stupendous physical force from—the force that defied our lines and arrows. And what was the point of that plated head? Could it be for protection from the stinging properties of the plankton that it fed on? This was my private hypothesis, however odd. The 'professor', Cecco, said absolutely No. He scratched his head and rubbed his chin: 'What is a cefalone?' We gave up fishing

for the day and dashed for home to put the trophy in formalin. Half-way there we met the *Formica* coming from Cundabilu and sailing towards Massawa. At our signals she stopped and we reached her.

'What's up? Something wrong?' Captain Solari shouted.

'No,' I replied. 'Tell them all to come on deck.'

One by one, the 'Formichieri' came drowsily out. When they were all lined up on the gunwales I stooped and lifted up the cefalone without a word. There was a moment's silence and then a general cheer, for the others, too, had lost a month and a half over the bewitched beast and had forfeited lines and arrows in the chase.

Back at Mersa Nasi we discovered that the cefalone would not go into any of the zinc chests we had. It was too long. To get it in one we should have had to throw away at least twenty pounds of several other rare fish that had cost us hours and hours of work and risk. In addition, we found that we had not enough formalin. It was useless thinking of waiting for the return of the *Formica* in one or two days' time, in that heat. We looked at our cefalone in mute consternation. They were tragic or comic minutes, according to the point of view. Then, without saying a word, Priscilla grabbed it by the tail, as if it were a poisonous snake, and dragged it up to the house.

That evening, we ate it. Apart from the fact that it was insipid and tasted like wood, we felt we were swallowing sacred slices of an 'only specimen' stolen from a museum.

*

The after-effects were serious. We lived for another month under the spell of the cefalone. We suffered the cefalone complex all over again. And when I set out from Asmara by

plane at the end of March leaving my friends behind to continue the research and hunting we had done together for so many weeks, I still had not had the satisfaction of seeing a captured cefalone. By sheer irony, during my last day's swim in the Red Sea, and precisely at Dissei again, I managed to get nearer than ever before to a shoal of those devilish fish. If I had had my gun I could have bagged ten of them. Instead, I only had my camera so I shot photographs. I have had the best one printed here. It is a valuable document. The water was crystal clear.

Altogether the outcome was a good one, because my two team-mates later repeated the success of Entedebir three times. One cefalone fell to Gigi and two to Cecci. This time they really ended up in formalin. Specimen caught, behaviour known (at least, in the general scheme of habitat, feeding, etc.), photographs taken in natural environment—we could shake hands.

CHAPTER 11

DEAD AND WOUNDED

THE moist heat (temperatures up to 140° F in the sun and 118° F in the shade were registered in this winter-spring period) would have killed a bull, or a dog, as it killed our Eros. We could protect ourselves by staying in the sea during the day losing heat in the water, warm as it was. We ate very little (practically speaking, once a day) drank as little as possible (this came naturally with our rationing system) and yet we led a highly active life. In the long run, however, few of us escaped some complaint or other. Cecco, Gigi and Priscilla had a full dose of tropical dysentery and Bruno Vailati and the doctor, Alberto, had a short but terrible attack. Silverio Zecca was out of action for a month with acute inflammation of the ear and Priscilla had this too. Captain Solari had conjunctivitis and Folco Quilici was reduced to a shred in ten days with a sudden attack of anaemia. Alberto had to cut a nasty whitlow out of Beppe's finger, and Mauro and the boatswain Mollo suffered from curious rashes.

As for wounds and sores, we of the scientific group, working in daily contact with the coral, were continually marked with fairly serious cuts on our hands, arms and legs. After a day or two each cut festered and formed a sore which would not close. The scars have remained. Remedies were useless since

we had to go back into the sea on the following day and the salt water opened them up at once. On many occasions our bodies were stinging all over where the sun crystallized the salt into all the cracks. We were just able to endure it until we went back under.

Each of us had his own particular brand of sore. Gigi suffered from tropical sores on the leg for more than a month and had to go, with Silverio, to the hospital at Massawa. Enza Bucher was bitten by a twenty-pound moray. She was passing it into the boat when it slipped away from the hands of Bruno who was hauling it in. After falling back into the water it got its teeth into Enza's heel but did not hold on. It tore her flesh about half an inch deep. She was immobilized for days, but fortunately there was no poisoning.

Cecco had his encounter with *Pterois volitans* plus plenty of sores on his legs and one elbow. Raimondo Bucher had a violent burn from a fire-coral (*millepora*) and a bite from a puffer-fish which by a miracle did not take his finger-end clean off. Finally, while I enjoyed the delights of my thousand scratches, I was more fortunate than the others in not having any real affliction, although I cursed that damned cefalone and the gash under my armpit (with salt inside) every night when I went to bed, having to adopt the strangest postures in search of comfort.

Late each night, a picturesque scene was enacted at the encampment of the four Robinson Crusoes. In a deep religious silence, occasionally interrupted by an oath, all four twisted and turned in inspection of bruises, tore off scabs, pummelled the sides of wounds, burnt needles and scissors, pins and pocket-knives in match flames and scoured out scratches and holes with bandages dripping with iodine. From time to time, one of them would call for help in tackling a wound in an uncomfortable position. There was a

willing response which carried with it the right to the return of the courtesy. Finally, still in pain and smelling of a chemist's shop, they would retire to rest and experiment for half the night to find the best position on the rubber mattress. But once asleep not even a typhoon would have shaken them from their well-earned rest.

*

Every member of the expedition suffered the consequences of his or her exertions in that unpropitious climate and environment. Gigi lost almost two stones, Cecco eight pounds; I lost twelve pounds and the others reduced in similar proportions. But perhaps the ones that suffered most of all in every respect were our feathered and four-legged friends.

There were many of them on the *Formica*. The 'conationals' were a licentious cat (Cita) who was given child by a repulsive, hairless, native cat as soon as we reached Massawa; an odd dog (Eros) belonging to Silverio who classed it in all good faith a 'shooting dog'; a second dog (Brick), a highly active white terrier, property of the Buchers; and a seagull (Gregory) which Cecco had caught in its infancy at the Argentario and which had become domesticated and appreciative. The 'natives' were the vulture Kil, already praised; a little osprey (Coso) which I had taken from its nest on top of a tree; a sturdy young kite (named Gandhi, because at first it would not hear of eating) given to us by Nasi; a pelican (Sehil) caught treasonably by Gigi from underwater with a harmless shot in the wing; and a monkey (Cuni, short for Cunegonda) given to Cecco by Arab fishermen.

Gigi and I were to blame for Coso's death. We did not know that the young of some birds of prey (even though Coso was as big as a cockerel) should not drink. In Cecco's

absence, after having fed Coso with pieces of fresh meat, we put two spoons of water down his gullet. The poor chap passed away with diarrhoea three days later. The next to leave us, stricken by the heat, terribly thin and probably suffering from some tropical disease, was poor, faithful Eros. One day he flopped down on to the deck of the *Formica* and wagged his tail for the last time. He was given a sailor's burial with full marine honours.

Sehil, the pelican, was the most difficult to cope with. For him it was a problem of pride. He was touchy about his food. He never accorded his warders a glance. They fought gallantly, thrusting sardine after sardine down his throat, and probably because of his defective bill (he had evidently been wounded in the past) he spat eighty per cent of these out. The few he managed to swallow were not enough to keep him alive. His death was felt by all, including the crew who whenever they weighed anchor had had his assistance.

Gregory the seagull, mascot of the expedition, had a curious, tragic end. Gregory had only one fault: sublime stupidity. And it was this that took him to the shades. When he was on the *Formica* we kept him tied by the leg to the bows, not so much to prevent his flying off as to protect him from falling prey to the buzzards, kites and vultures buzzing around the neighbourhood. Whenever we moved he came too, and kept guard over the encampment. One day, Gigi, Priscilla and Cecco landed on the desolate waste of the island of Ota. Before setting out for the interior on reconnaissance Gregory had been fastened up—now routine—in the bows of the *Formica* to await their return. When they came back after a few hours, they found the string snapped and no Gregory. They returned to shore and found the claw-marks of our friend imprinted in the sand and going in the direction of the desert. They followed the tracks until they came to solid

rocks. Here they shouted and searched for Gregory. No reply. He had disappeared. His trail, that uninterrupted hopping manner of his which revealed the untrained duckling, had stopped abruptly. Cecco and Gigi tied a wooden board to the snapped string and carved this epitaph on it: Gregory lost S.N.S. (Spedizione Nazionale Subacquea).

*

After producing five kittens, Cita the cat exhausted the patience of the crew and they threw her out. Every night a horde of disreputable cats gathered on the wharf at Massawa waiting for the 'white Miss' to finish her sumptuous meal in the ship's kitchen and come out for her evening promenade to distribute her favours. Terrible scuffles often broke out, to the sound of lacerating miaows and hissings that made our hair stand on end. It all ended one night when our Mollo flew into a rage and dropped on the group of wretches with a big stick. The scraggs melted into space. But one of the smacks hit the back-end of the cause of the uproar—Cita—and with a piercing howl she rocketed into the tropical night. She was seen once again from a distance, under the escort of four of her Massawan lovers. Just before the expedition left a black boy turned up on the quay and who should be in his arms but Cita. She was issued a pardon.

Brick, the terrier, is still the good fellow he always was. He probably does not remember a thing about Massawa and the tropics, and he does not seem any the worse for it.

Gandhi, almost an eagle, lives in the Baschieri's house by the sea. He is still sulky and contemptuous, and keeps strangers at a distance with his formidable beak. In all probability he will finish up in glory—that is, in a cage in the zoo.

The mad monkey, Cuni, has also made the ark of Baschieri its fixed abode. It has definite friends and violent hatreds. It adores Cecco and Priscilla, likes Gigi and me, and nourishes a bitter hatred for Folco, who on one far away day punished it for devastating his berth on the *Formica*, by giving it a kick on its scarlet backside.

CHAPTER 12

CHIRPING GIANTS

EVERY day, every hour of our exploration in the Red Sea brought us surprises, every one of which is worthy of description. But as it is impossible to write about them all, I will dip into my diary at random.

Off Dur Gaam. Gigi, Tesfankièl and I stayed at Mersa Nasi to work as usual in the channels while Cecco and Priscilla joined our friends on the *Formica*. After a visit to Massawa they returned to pick us up. On the way back they stopped at the island of Dur Gaam to reconnoitre a possible site for our new camp. The *Formica* was two hundred and fifty yards from the shore on about 150 feet of water. Two huge black humps appeared in the distance then two more beside them and then another four, until there were eight in all. The 'Formichieri' ran to the gunwales and scanned the sea. The eight humps reappeared and the sound of a mournful lament was heard. There seemed to be suffering in the air. Nobody knew what it was or where it came from. The eight giants sank under the waves, then another eight came up with a thump. These latter were roughly fifty yards behind the first group. Meantime, Bruno, Cecco, Folco and Giorgio had gone off, to reappear after three minutes with masks and fins on and their underwater camera at the ready. They flopped into the sea and Priscilla followed them.



24. *A handsome angel fish caught by Cecco for the ichthyological collection. On Baschieri's back is the Micro, an Italian version of the Aqualung, which is the French breathing apparatus that provides compressed air.*

Like five maniacs they paddled towards the first platoon.

Eight monsters here. Eight monsters there. How long were they? Twenty feet. The monsters advanced. What were they? Certainly not sharks. Whales then? Probably, but let them come nearer. As the first line of black humps approached the four men spread out. Then they dived and Priscilla took a dramatic photograph of the meeting (reproduced). Then the sea hid them. Before them now they saw only a clear, silent, bottomless blue. They were surrounded by blue on every side and without being aware of each other they waited second after second in the abyss. Then . . . they heard that chirping draw near (what was it?) and the underwater horizon became dark and disturbed. The eight giant heads rolled on towards them, drew them into their midst, made them spin in the whirlpools of their tails, then passed on over their backs. The four swimmers bobbed up to the surface and said something that was carried away by the wind. The cetaceans were coming again. Herd number two bowled across the waves. The four went under, came up and went under again. Once more they were in the midst of the giants and could even touch them. Ravelli navigated twenty feet underwater between two of them to take photographs; he looked like a twig between two trunks. And the squeaking! The whole sea seemed to be chirping and squeaking. It was the cetaceans calling to each other. Were they commenting on the strangest encounter of their existence?

After a quarter of an hour the merry-go-round was over. Fed-up or disappointed with these ridiculous fish, the lords of the sea turned their tails and cleared off. Bruno, Giorgio and Cecco hurried back to the boat. 'Pilot-whales', said Cecco. But where was Folco? Odd. He had remained out there looking under. Then slowly, looking round at the same time, he reached the boat and dragged his legs in hurriedly.

‘What were you waiting for? A mammy’s darling?’ said Giorgio. We always referred to a shark with a nasty face as a mammy’s darling.

‘Just that—and it was twelve feet long.’

*

Off Dur Ghella. There was a long striped rock in the middle of the sea. A motor boat approached it with Cecco, Priscilla and Gigi on board. (I had left direct for Dissei two days before). The rock was thirty feet long and its name was—whale-shark.

The boat reached it. They stopped the motor and rowed slowly around. The rock remained still, with the waves splashing lightly over it. Gigi’s leg was bandaged and he could not go into the water. Cecco had not got an underwater camera so there was no point in his going in. If I had been there with my Robot we should have secured a document which although not new would have been none the less interesting, for this animal is quite rare. In any case they got shots of it on the surface. They looked at it and shouted at it but the rock did not budge. He had not even noticed them. Gigi became impatient. He wanted to capture or kill the rock: ‘If we can manage to drag him to the shore we can take the most interesting parts for study—the skin, the skull, the innards . . .’ Cecco laughed in his face; they hadn’t even got the harpoon and if they had and had the courage to fire it, they would finish up in the Americas ‘on tow’, or still ‘on tow’ at a depth of 600 feet. There was a devilish look in Gigi’s eyes. He rummaged under the stern board and took out a package. Cecco’s chin dropped and Priscilla murmured disapproval. The package contained gelatine. Cecco said it was madness, but at the same time worked feverishly

preparing the bomb. He stuck the detonator in that pound lump of butter. Gigi was already standing wobbling on his game leg, ready to blow the rock into the air. Ready? Let him have it.

The sea was calm and sparkling gloriously under the sun. The whale-shark swayed a little and a shoal of pilot fish splashed around. The bomb was cunning; tied to a cork by a string and a short fuse. Gigi threw it and Cecco rowed madly away. The package dropped in front of the snout of the whale-shark, a snout that was five feet across, and the fuse fizzed like liver salts. The whale-shark became restless, flipped its tail and moved forward. The bomb went under it, although the cork helped to keep it near the surface. The whale-shark stopped again and the last inch of fuse was burning to the left of its belly. . . .

The sea was calm and sparkling again. The explosion had very nearly sunk the boat. The whale-shark had moved off slowly, superbly, imperiously, and disappeared into the depths. As a souvenir it left a soup of rigid pilot fish.

*

At Ras Felag Bacar. Cecco and Gigi were hunting in deep water for big game, but without success. I was rowing behind them, smoking and chatting with Priscilla. We noticed something in the distance splashing like the deuce. I called the swimmers and we set off with the engine roaring. It turned out to be two huge turtles flirting between the waves. The female, the larger of the two, was on her back with only her head above water. The male who was head-over-heels, did not realize that eight inquisitive eyes were profaning his privacy. The female saw us all only too well and wanted to call it a day, but the male kept her prisoner.

Cecco, the boor, banged the armour of the male; he bounced up, giving us all a soaking, and fled to the bottom of the sea followed by his consort.

*

North of Entedebir. I was in the water with my two colleagues, although some way from them, looking for a group of 'cefaloni' which I had just noticed. I climbed on to a madre-pore block holding a sort of bream on the end of the harpoon and looked around for the clear fins. No sign of them. As I put my head underwater again I found a black-fin staring at me motionless. It was about five feet long and only a few yards off. At this stage black-fins made me neither hot nor cold. I decided to try an experiment—the 'shark call'. I gave out a terrific yell (underwater, naturally). According to legend the black-fin should have vaporized. Instead, it was still there, watching me in a stupefied way with its yellow eyes. I changed tactics and punched out with my arm. The black-fin turned its head away quickly, half closed its mouth and stared at me with one eye. I could feel it exploring right into my guts. We looked straight into each other's eyes without understanding each other. Then I remembered that the gold and silver striped bream was still on the end of the harpoon. The black-fin then was waiting just for this. Perhaps I could offer him the meal and grab him while he was feeding. I began to loosen the harpoon, keeping one eye on the shark. But while doing so the bream, disturbed by all the movement, made one last effort at liberating itself and dropped into one of my hands, planting its dorsal bones between my fingers. I flung it away instinctively and bream, arrow and gun landed almost on top of the shark. This time it really did vaporize.

*

Off the Isle of Mara. Fifty, a hundred or a thousand dolphins? Our little boat was chugging around in dolphins, not water. They were dashing everywhere at high speed, playing at ducks and drakes, disappearing under and then springing out with a squeak. The sea was full of squirrels, clowns, jesters, rubber tumblers. They leapt out of the water for a couple of yards and flopped down again with all the force of their tails. The sea was churning foam. It was the carnival of the mad fish of the sea. As they passed by, they covered us with confetti. The sea was a mass of rainbows. It was the mad carnival of a torrid winter afternoon.

*

Cundabilu. There was a manta down below and our companions on the *Formica* left for the hunt. Bruno was the first in and he shot it in the wing. The manta made a quick getaway, taking Bruno by surprise and tearing the gun from his hand. The manta weighed a good three hundredweight so perhaps it thought it could break away scot-free. But Silverio had placed himself across its path. He in turn fired and hit it. The manta spun round, snapped the line and kept the arrow-shaft in its back as a souvenir.

If anyone should come across a manta of about three hundredweight, with an arrow in its back and another in its wing with an entire gun hanging from this, will they please remember that the equipment is ours?

*

Port of Massawa. Mantas here, mantas there. Priscilla had shot one too. But the biggest one of all shot underwater, bigger than Cecco's, Gigi's and mine, was the one shot by

Raimondo. It measured eight feet across and weighed over two hundred pounds. (Its true weight was probably greater because it was weighed a day after capture.) It was shot and killed in the filthy, yellow water of the harbour with people cheering the lonely toreador from the quayside: 'Here—there—no, behind you—it's coming. . . .' Raimondo had already got one arrow into the beast and he followed it to the bottom plugging it with another. After a bitter fight the manta surrendered. While Raimondo hauled it on deck the Yemenites and the Dankals who had been watching from the *sambuks* and the wharves applauded, laughed and slapped their turbans.

On the wharf there was the customary colonial wiseacre who knew all there was to know about sharks. 'There are dozens in the port of Massawa, of the most ferocious kind, the ones that follow the ships. During the war of '36,' he said, 'because of a slip-up, a lighter with twenty-five soldiers aboard tipped over.' Dramatic pause. 'Not one of them got away.' Our friend had been watching the toreo in silence. He shook his head gravely and went off.

*

Ras Ilet. Among the many abominable dangers of tropical waters which we had read about was the infamous giant clam or tridacna. This is the biggest shell in existence (a bivalve mollusc). Examples found in the Indian Ocean measure up to five feet across and weigh up to two and a half hundredweight. Sometimes these shells are used as holy water basins (those in St Sulpice, Paris, for instance, given by the Venetian Republic to Francis I). These horrible creations are fixed to the sea floor and camouflaged perfectly by a varied vegetation growing on their ancient jaws, which

remain constantly open in expectation of their victims. These hardly cross the fatal threshold before the mollusc snaps the pincers shut—bang. If instead of a silly fish the pincers have trapped the hand or foot of a careless pearlfisher, he may recommend himself to the mercies of God. It would take a lot of dynamite to force the hinge on that coffer.

Where were these huge clams then? We found thousands of them in the Red Sea, but they were of moderate size. The biggest one we tore from the sea-bottom was little over a foot broad.

The coral shallows at Ras Ilet were throbbing with molluscs (ah, those cowrie shells . . .) and there were many of these clams, one at least on every rock and madrepora. I carried out some experiments.

I wanted to check especially the claims of the underwater explorer Hans Hass. He has stated that the tridacna of the Red Sea possess an incredible sensitivity for a mollusc and that at a distance of ten yards they will close suddenly at the slightest movement made by a man. I began by making movements with my fins, in the direction of the mollusc, at a distance of only two yards.

Then I got slowly nearer and placed the blade of my knife between the valves of a big one without actually touching any part of it. The clam did not even twitch so I tried poking it in the flesh. It contracted slightly and the valves closed about half an inch. Finally I plunged the knife between the valves into the body of the clam—the doors closed with a bang. The knife-blade was easy enough to draw out again because of the indentation of the valves. I repeated this experiment with several clams using my fingers. Only one out of twenty actually nipped me and then only when I was over-rough with it.

Naturally these observations on small tridacna are not

valid for the real giants. Yet I suspect that legends have been built up around this colourful sea-character. I do not doubt, as I have already mentioned, that some unfortunate pearlfisher may have ended up in that deadly embrace because it is impossible to open the jaws of even these small types. But I wonder if the giant clam would really be interested in the limb of a gastronomically unpalatable big animal which must have been pretty blind to fall right into that trap. In addition, it has no real enemies at the bottom of the sea, so the hypothesis of self-defence is unconvincing.

I infer in consequence that an isolated case or two has given rise to the legend—so moving, terrible, justifiable and romantic but unfounded.

*

Dahlak Kebir. The sun had slipped behind the sea some time since. I was on my way back to Nasi's house, having been hunting for the past two hours. Gigi was unwell and had to be given a good supper—pigeon-breast. Four turtle doves huddled in my shirt, and the gentle warmth of their feathers was against my skin. I took a short cut across a wide beach, avoiding the rocks. They say that the snakes come out at night and they're easy to tread on.

The moon was rising and the beach was white. The sea was far away at low tide. I could just see the silhouettes of numerous birds chattering and hopping around the salt pools. One near to me unexpectedly flapped away. Then there was a scream and a plop on the water and a gruff chuckle. Was someone following me or was I imagining things? The beach narrowed and the rocks came down to the sea. Here I should most likely have to wet my feet. No, there was a strip of sand and then the beach opened out again.

I crossed over the tongue of sand. But what were these monstrous shapes in the night? Thank heavens! Only dromedaries. What on earth were they doing here at this hour? There were ten or twenty of them in single file with the head male in the lead and the others in order behind, the very smallest bringing up the rear. They looked double their size in the gloom. They were coming out of a ravine and making for the sea. On seeing me they stopped and stared. If I wished to continue, I would have to make my way through them. Something, however, restrained me. I felt as if I had been locked in a park after closing time. The line continued way back through the ravine. Were all the wild dromedaries of the peninsula gathering here tonight for a dromedary orgy?

We remained staring at each other, the big chief and I, for five minutes. Suddenly my inquisitor let out a long lacerating bellow. The birds fled and there was silence. Then the bellow was taken up and all the dromedaries on the island blew their lungs out—a strident nasal sound, the sound of a stupid malignant animal. 'This time,' I told myself, 'they're going to do me in.' Tired of hanging around, the reaction came to me instinctively. I took my gun by the barrel—it would have been a mug's game to shoot—and marched on towards them bellowing too, like a primitive man before throwing his club.

It worked. The dromedaries got the wind up, broke file, pounded back up the ravine and scattered.

The beach was deserted. I continued my steps in the moonlight.

*

The Formica on the high seas. Cecco and Gigi were stretched out on the anchor cables when Asgodum, the negro boy,

came rushing up to them. He had a terrified bird in his hands—a little tern.

'I caught in the bows. It came in from the sea,' Asgodum shouted.

Cecco looked at it and stroked its head. 'Let it go now.' Cecco took it and Asgodum returned disconsolately to the bows.

'Let's put a ring on it,' Gigi suggested.

'A good idea.'

They made a light tin ring, marked it 'Formica S.N.S.' with the date, and slipped it on the leg of the bird plus a piece of thin string so that it would not come off. Then they let it free and continued their conversation.

'Mr Cecco!' Asgodum was back again like lightning and highly excited. 'Look, Sir. Other bird come with piece of tin.' He had the ringed tern in his hands.

'How strange. Good fellow, Asgodum. Now you may go.' Cecco and Gigi controlled themselves. As soon as Asgodum had gone they sent the tern off again. Ten minutes passed. More excited than ever, Asgodum appeared for the third time.

'Ah, Mr Cecco, Sir, look here: other bird with piece of tin.'

'Extraordinary.' Cecco reflected. 'Let me have him.'

Asgodum hurried off to catch other terns with pieces of tin. Cecco ripped the piece of tin off, threw it into the sea and freed the bird.

Five minutes passed by. Asgodum came again with his eyes popping out of his head.

'Sir, Cecco, Sir, something goes on here. Look, bird with piece of string on its leg.'

Cecco exploded with a howl.

Dur Ghella. 'I don't understand,' said Cecco. 'There are pearls in this sea. There are the oysters in front of us. We go under and we see the oysters. And why in the name of hell don't we drag up a heap?'

The theme of the evening was: 'Does the person who finds the pearl keep it for himself or share it with the others?'

'I won't sell it. I'll give it to my wife.'

'Well I'll sell mine. I'll offer you a drink and buy myself a sports car.'

'Selfish pigs. You'll sell the pearl and share the earnings.'

'And what if we get two?'

'You'll share them the same.'

'Well, if I get two I want to keep one of them.'

'We'll paste your face for you if you do.'

'Then I'll eat it.'

'And we'll put a stopper on you with a seal.'

'Joking apart, all the *bil-bil* and the *sadef* (pearl oysters) we get to-morrow will go into a communal heap so nobody knows which is his. Agreed?'

'All right, but I'll make a mark . . .'

A day later, dreaming of millions, the scientific nucleus was to be seen scraping the depths and not caring a hoot for the rare fish.

'We are practical men, damn it,' was the disreputable order of the day.

In the afternoon the pearl oysters were opened with trembling hands in a filthy stink. Not even half a pearl. Only a few pearly humps, beautiful to look at but not worth a fig. On the following day the four returned to their rare fish.

The pearl-fishing grounds in the Red Sea generally lie well away from the islands, some of them to the east of the archipelago of Dahlak. Being in the middle of the sea, they

are usually discovered by chance and kept highly secret by Arabian professionals. The *bil-bil* in these grounds take root on deep sand-banks and are difficult to spot.

*

West of Entedebir. We caught another shark by line. It was a five-foot white-fin and jumped around the boat like a jack-in-the-box. 'Give it some tea to calm it,' I shouted. Gigi, who was dancing like a parrot in the bows with the thing right under his feet, took the comment seriously, got the flask which was still full of watery tea and stuck it quickly into the beast's jaws. Glug, glug, glug—and down went half the contents of the flask. The shark went rigid, stone dead.

We repeated the experiment a second time with a black-fin, also caught by line. The first case was repeated exactly . . . to the last bitter dreg.

*

The Island of Sciumma. Towards the end of our work in the Red Sea, the biggest shark catch, although quite innocuous, fell to Silverio. It was a nurse shark—a shark 'of the sand' because it feeds on molluscs on the sea bed, rather like a red mullet, with the aid of two fleshy whiskers hanging from its upper lip. Silverio's nurse-shark measured seven feet. It was shot in the back with a 'Cernia' gun (the gun with the double spring that we generally used). At first the selachian put up a strong resistance and tried to drag Silverio off. Then it got tired and surrendered.

It was Silverio, too, who made up for a month he had had

to spend in hospital by catching a turtle on the open sea, as broad and venerable as the Round Table.

*

Channel south of Nocra. Raimondo and Alberto were hunting together as usual. A handsome black-fin of about four feet came along. Raimondo followed it, shot it in the flank and grabbed the line. The black-fin tried to flee but succeeded only in dragging his assailant a short distance. Alberto arrived on the scene to help. He fired too. It was all over now. Or almost. The two of them took it to the boat. Raimondo got his camera and took the best shots possible. The shark co-operated. In fact, it smiled. As they were about to haul it on board, the black-fin woke up with a shock. It lashed out with its tail, shook off men, arrows and gun and departed without saying good-bye.

‘But when we were talking of taking its photograph, it was as vain as a turkey-cock,’ moaned Alberto.

*

Enteraia. We left the island behind us, and with the outboard chugging travelled towards Mersa Nasi. We had worked all day from dawn to dusk and were tired. Gigi was holding the tiller and slithered us safely between one sand-bank and the next—we knew them all by heart now. It was going to be dark that night for there was no moon. Still, we had few apprehensions about banking. From time to time I shouted the way to Gigi. The water sloughed over the wooden boards. The sea got blacker. The sky was filled with stars and the shadows of the sleeping islands changed.

The engine coughed, hiccupped and stopped. We had run

out of petrol. There was another mile to go, so we should have to row it. Gigi took the oars without enthusiasm. It was already late. We could go to bed without eating and sleep on the misfortunes of this life.

The stars were wonderful. 'If you half close your eyes, Cecco, and look up, imagining the sound of a mandolin, you might be at Santa Lucia. Now I'll sing it to you.'

'Crikey, you're tone deaf.'

The boat went slowly on, zigzagging through the corridors of submerged coral. A lone bird screeched overhead without our seeing it.

'Look at the sea, Cecco.'

Gigi stopped rowing. The sea was black, except where the boat and the oars cut into it. There it was a miracle of phosphorescence. Gigi lifted the oars and a shower of light dropped from them. I dipped my hand in and on taking it out the light remained under my finger-nails. We were in the phosphorescent bank of plankton. As soon as the micro-organisms are disturbed they make this luminous discharge and then become invisible again. The bows went forward in the neon soup, and slightly speeding up, we could see each other in the light. All the islands, all the rocks far and near were bordered with this light. Down below deep-sea lamps glowed and expired a second later—big fish passing through the plankton. Shoals of small fish turned on shimmering fountains of light while the barracudas and sharks sent meteors and comet's trails spinning across each other. Down in the channel and in the lagoon we could hear the boom of leaping monsters, of giant mantas. The great sea was alive. A skipping needle-fish darted through the air in the distance, beating the water with its tail and leaving a stream of light. It coursed like a fire serpent across the sea towards us and avoided us with an impressive Catherine Wheel.

We made land (our usual cove) and disembarked. Our feet moved around in the molten metal shooting sparks. We might try lighting a cigarette? Then someone splashed someone and the fun began. Fire everywhere, ourselves ghosts in a starlit night, our heads dripping fire-flies.

CHAPTER 13

TABU

THE black man is a different being from the white. It may be true that they are both sons of God but the brain of one is made in a certain way and the brain of the other quite differently. The black man manages to understand the white, but the white man does not understand the black and feels that he is always far away on the other side of a screen. The black man is just as intelligent perhaps, but while the white is more logical the black is more fatalistic. White logic is very often purely theoretical and not reflected by practice. The black follows his instinct. He obeys the human and divine laws neither from fear nor tradition, but from instinct. For instance, the white man does not believe in spirits; theoretically he has no tabu. The black, on the other hand, treads a twisting path through a veritable jungle of tabu. The white man feels free and zig-zags through life. The black man proceeds with scrupulous care and never makes mistakes. The logical white man is always a heretic, but the black man, believing at the same time in Christ and tabu or Allah and tabu, alone possesses a certain and profound faith about life and death.

It is a disturbing adventure to enter, or to try to enter, the world of a black man born and bred in a *tucal*. If this man likes you, trusts and esteems you he can reveal a spiritual



25. Cecco on the sea bed looking for new kinds of corals. Note the thick gloves, for protection against the corals' knife-like branches, and the hammer (of the type used by alpinists), which is essential for splitting the tough calcareous trunks. Thus equipped, we collected specimens under perfect conditions.

world which may seem terrifying but which has been valid for thousands of years to millions of others.

His life must go straight like a billiard ball through a forest of skittles. The skittles are the tabus. If a skittle is knocked over a point is lost and the black man pays with a malediction. Everything is known to him at the outset and the Law is immutable. All the black man has to do is to obey blindly. Everything is accounted for. If the black man falls ill, if he is bitten by a hyena, if there is a drought, if a snake comes into his house and kills his child, if he dies accidentally—tabu; he has touched a skittle, perhaps not realizing it at the time. We live through grace and the black man has always known this; he has inherited wisdom, in our estimation an absurd wisdom perhaps, but still a wisdom with its own peculiar logic.

'You don't believe in the Budàhs, Mr Gianni, but what I am telling you is true.' Tesfankièl was staring at me and in the night all I could see were the black centres of his eyes and the whites around. It was a silent night on an island without any human beings but Gigi and me and this black man who was speaking with his finger raised.

'I saw a Budàh. At Massawa. He had come from the mountains for a cattle sale and the *nacuda* Santon Sayed pointed him out to me. To me he was just another negro; tall, thin, wearing a lurid barracan and carrying a stick. He walked in the manner of the mountain people of Eritrea, lifting his bony knees like a dromedary. He seemed just another negro. But he was a Budàh.

'The Budàhs are wicked tribes, but there are so many of them that they come to the other tribes to spread their evil. If Budàh hates you or if you offend Budàh, he closes his door, takes out special root and prays to the devil. Then he speaks your name and—*trac*—snaps root and you die on the spot

even at the other side of the sea. Never tell your name to a Budàh! . . .' said Tesfankièl.

'No, you white men are not in danger from Budàh because you eat salami. Me too Catholic and eat salami, but am black man. And once when I was boy I played with the son of Budàh without know it. Then they told me: you don't know, but that Budàh. And I play no more. After three days was ill unconscious. Pains in the belly and near die. My mother called the Santon. He pray and after thirty days I get better. . . .' Tesfankièl whispered in the night. The leaves around us rustled and we could just hear the sea washing over the beach.

'The Budàhs change into hyenas and come to the villages to laugh and shout their uar uar hahahahaha! They turn to hyenas and come in the night because they run fast like this and can come to the huts and hear the names of those they want to kill . . . Yes I see the Budàh. With these eyes I see him run out of the village and turn back to man behind a bush. . . . Yes I am Christian. But what this mean? You don't understand, Mr Giggi. You and Mr Gianni not good Christians because you no pray. I know you not pray. I have never known good white Christian. You no believe in Budàh and King Solomon, but you have many tabu. Mr Cecco shouts and puts salt over his shoulder. My boss shouts if I put hat over his bed. You make strange signs if black cat passes you at Massawa. What does mean the salt, hat on bed and poor cat? And you no pray you white men, but always with salt and black cat. If you come Mr Gianni to my momma's house, you who know more than me of the world and knowledge, you see Budàh become hyena and see the root that kills. Then you pray to the Lord and King Solomon for protection. In my house I have big picture of Jesus, yes, black with long beard and spear because he is strong. . . .'

The time passed on this March night. . . . The breeze had dropped, the leaves were still and there was no sound of the sea.

Over there on the far horizon was an island, the isle of Tabu. Every black man who lands there dies. Not from disease, nor from spears, for the island is deserted, nor from snakes, hunger or thirst—he just dies. During the Italian war in Africa the military commanders wanted to place a gun on the island to watch over a channel to Massawa. Five Ascari volunteers were dispatched with the gun, munitions, a tent, food and water for a fortnight. Precisely on the last day of the fortnight the relief boat arrived with a replacement of men and provisions. The first five were dead on the ground, some in an advanced state of putrefaction, the others just expired. The post-mortem examination failed to establish the cause of death.

Radiation? Autosuggestion?

Down there behind the line of black islands the Red Sea carried fire water. You just had to dip your arm in and death would follow. You could not see anything—no algae, no fish, no colour. The water was pure or perhaps a little cloudy from the usual plankton. The fishermen of the *uasif* who throw their nets in those parts, or the pearl fishers who swim there without knowing, all die, apparently, after one or two days with atrocious pains. It is not the water that burns, but the fire inside it. Some dying fishermen have been transported to the hospital at Massawa, but none of them has ever been saved and the cause of death has never been ascertained.

Certainly, it is a stinging plankton that is exceptionally poisonous. Certainly it is composed of microscopic algae. And then the suggestion!

On the opposite coast, before the Yemen and in southern

Dahlak, there are some great underwater plants with long, black branches like the arms of octopuses. If a pearl fisher passes near one of them an irresistible suction draws him into the clutches of the branches. He is killed, his blood is sucked and he is devoured. Many have died in this way and the plants are there to be seen.

But surely this can't be taken seriously. There are no algae like that. There are some that feed on insects—but men! There are no octopuses in the Red Sea and no corals capable of articulated movement like animals. All right, but there is the 'black coral' which has twisting arms in which the unwary person might get entangled. Then—the suggestion!

Legend, fantasy, imagination, myth, madness, truth, mystery, horror and anxiety in man. Tabu!

The stars filled the sky, but banks of white cloud were coming up from the south slipping past the moon. A strange, quiet night. Only the sky was alive.

Tesfankièl smiled and looked at the clouds. 'The monsoon is coming,' he murmured.

CHAPTER 14

DUR GHELLA AND ITS INHABITANTS

THE inhabitants of Dur Ghella are numerous, but they are not human; they are crabs, round crabs, white or yellow crabs according to age with two little ruby eyes and a sort of antenna-periscope. Sometimes as big as a fist, they are called grandly 'Pyramid Crabs', but they have nothing to do with the Pyramids.

When our boat touched the great beach on the east for the first time we were amazed to find an army of these creatures running all over the place, awkwardly but at high speed. Then they disappeared, each one like a mouse into its own hole. Beside every hole there was a little hill of sand, a regular cone, a 'pyramid' that might have been built by a child. We had read about these crabs and pyramids but had never imagined that on one beach we should see so many 'sea sweepers'. And in fact, the beach was a picture of cleanliness.

As we landed we felt we were being spied on from a thousand holes. We looked around, squinting against the blinding light of the coral beach (which was completely white or faintly pink in parts) and saw a multitude of intent, inquisitive, red pupils. Only the antenna-periscopes were sticking out of the round holes under the pyramids.

We began unloading. The *Formica* was waiting off-shore until the operation was completed, then she was going back to Massawa with our friends and Gigi too, who was feverish from his leg, which was getting worse. Cecco, Priscilla, Giorgio Ravelli, Tesfankièl and I disembarked, accompanied by the various feathered friends of our travelling zoo.

The desert island of Dur Ghella is eight hundred yards long and two hundred yards wide and is either the crest of a coral mountain come up from the sea or a huge salami that has fallen from the sky.

No houses this time. We camped near the only bushes on the island, a thicket of mangroves and acacias growing around a sea pond. The pond was not connected directly to the sea, but the tides filtered slowly through its muddy bottom. The bushes would afford us some shade from the sun since it was now March, and as there had been no rain for a year the temperature in the shade rose with an alarming ease to 98° F or more.

Our boat was small and we had to make several trips to get all our equipment on to the island. The *Formica* was staying a number of days at Massawa and we needed plenty of water and food, a certain number of zinc chests, jars and boxes for the biological collections, the gas ring, the nets, the oxygen equipment and the thousands of odds and ends that are so often forgotten (hammer, soap, tin-opener, DDT, acetylene lamp and so on). The equipment gradually piled up on the beach, and while the others continued going to and from the *Formica*, Cecco and I studied the thicket for a suitable camping spot—without finding one. When Priscilla and Giorgio came back from the last trip they were horrified to find the boxes, bottles, chests and other baggage on the beach covered with a living wave of crabs.

For days and days the crabs were our colleagues, our

guardians and the object of our boiling anger. At first they were shy and retiring, but little by little they took courage and advanced. They advanced relentlessly in cautious stages towards the tent in the mangroves, shifting their holes a yard at a time as an army would dig trenches and advance without exposing itself to the enemy. At the end of four or five days our tent appeared to be surrounded by a Lilliputian but impressive camp of redskins. The foot-high sand cones seemed to be small tents, and, with a little imagination, those red periscope eyes became painted feathers. We called it the siege of the Sioux.

After completing the encircling movement, the Sioux crabs began the assault. Not all together, however, and not with war-whoops. They remained in respectful fear of us and we only had to move our feet to see them dive head-first into their dens. They used to attack singly and methodically, taking advantage of our absence, of the darkness or of our forgetfulness. They crawled along guardedly and suspiciously and stiffened up at the slightest creak. They halted at every two feet, then, reassured, they darted off again at high speed and overcame another stretch of territory. It was a fascinating, closely calculated attack.

We, the besieged, were delighted. There was no cleaning up to do. The site was a model of field hygiene. There was no rubbish, no bits of meat, fish or spaghetti to be seen. But the Sioux gathered strength and the left-overs from our not over-big meals were not sufficient. They became more audacious and some of them pitched their tents at not more than a yard from ours. Then they began lifting stuff. They began with the metal caps of the mineral water bottles, nothing serious, but then they passed on to teaspoons, matches, to Priscilla's paint tubes and brushes and to entire ship's-biscuits carried away from under our noses. Matters

were taking a serious turn. Finally, one sad day, the besieged reacted against the local Sioux tribe. Their quarters were razed to the ground, their holes were devastated and many of them paid the penalty of their audacity with their lives.

Our drastic offensive was provoked by events having to do with a fountain pen and my right ear. Some weeks had passed since our landing, and Folco was with us. Every evening, scrupulously and without fail, he wrote dozens of pages of letters, diary notes and memoranda. He typed everything and in that deserted island the tapping of his typewriter sounded like a machine gun. But on that fatal day Destiny had cast its net with care. The threadbare ribbon of his typewriter refused to imprint even a comma on the paper. Folco did not give in. He took up his pen and continued unperturbed. At a certain point he felt thirsty (Destiny was at work). He got up and went to find a bottle with a drop of water in it. It did not take him more than five minutes to find one among the empties but when he got back his pen had vanished. He had left it there, on the notebook, he was certain. He asked everybody, cursed the practical joker, was polite, felt our pockets, but finally gave way and began to rant and fume. 'It's all very well if it doesn't go on too long.' An hour had passed and the evening drew on. He had to finish that page. He ate apart, in silence, watching us. The mystery was then unveiled by the faithful Tesfankièl who had been going round the Sioux tents with a lantern. He suddenly shouted for us to come to one of the holes. The pen had been drawn inside and was just visible at the entrance.

But Destiny had not yet finished its work that evening. I was sitting on the ground at the tent entrance under the acetylene lamp which was hanging from the branch of a tree, smoking and quietly writing an article for a newspaper.



26. A day's catch at Dissei. The third fish from the left is a 'cefalone', this is followed by a grouper, a tunny fish, two Arabian bustard, a fish belonging to the family of Plectorhynchidae (the second fish in the row belongs to the same family), and a grouper; the first fish in the row is a bream. Above the 'cefalone's' muzzle is a box fish.

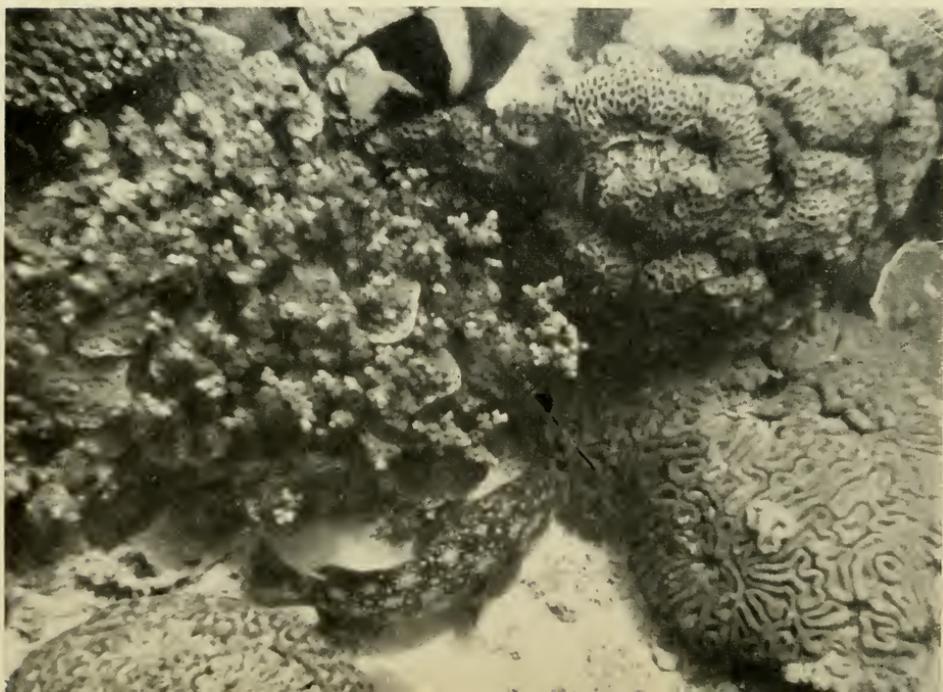


27. A rare, brightly coloured, coral fish.



28. *Butterfly fish, playing 'follow-my-leader'.*

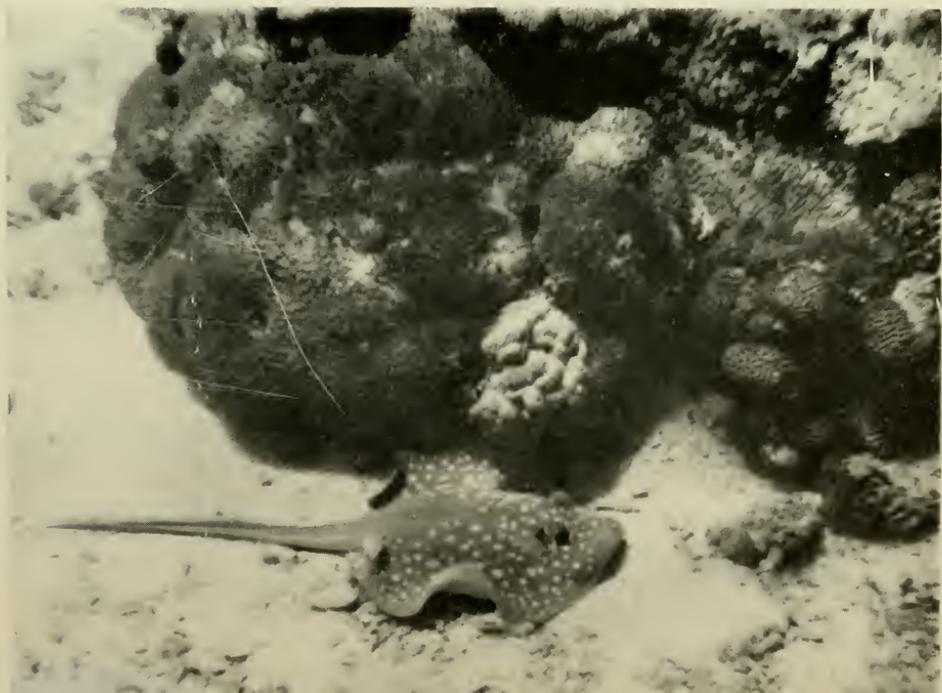
29. *A young grouper about to vanish into its coral den is peeved at the unfairness of the game. A butterfly-fish hovers, awaiting the next move.*





30. *Dur Ghella's performing octopus.*

31. *Offended at the photographer's impudence, the stingray stalks glassily ahead as though in a ruffle of skirts.*





32. *Philosopher, dreamer, or perfect idiot? I found this fish on the other side of the coral barrier at a depth of 45 feet and he let me touch his tail. Nor did this upset him, for he moved off only a couple of yards and stopped again. I photographed him three or four times in different positions, and in the end it was I who went off, on the tips of my toes, not a little perplexed at encountering so odd and charming a character.*

Then from the corner of my eye I noticed a slight movement at my side. I had a closer look. A Sioux! A big one with two burning eyes. He was trying to get into the tent. This had never happened before. He must have been a tribal hero. I growled at him and tried to lift him away with my hand. But for some reason or another, he dropped right into the tent. 'I'll smash you into little pieces', I vowed, and taking hold of a hammer and a torch, I followed. I looked in all of the out-of-the-way corners, scoured under the rubber mattresses, moved the straw pillows, raked through the clothes. In short, I turned upside-down the frightful mess which made up the normal order of our nocturnal refuge. And I couldn't see a thing. Convinced that the Sioux had gone out somewhere I took up my writing again in peace and quiet.

After an hour I had finished. I went to have a drink and was the last to turn in. I stretched myself, yawned and placed my head on the pillow . . . a tremendous yell lasting more than a second tore the others from their beatific dreams.

'What's wrong? What is it? Where? Who the hell . . .?' Cecco already had the rifle in his hand.

'Here, here,' I shouted, 'it's him!'

'Have you gone mad?'

'Get a light. I swear it's there. Look at my ear. It's red, eh? I told you. He nipped it, the swine. Yes, it's there, in the lining. The hammer, give me the hammer.' Smack! With a blow that would have killed a bull, the Sioux was turned to pulp.

A complete extermination took place on the following day.

*

The vegetation of Dur Ghella was something quite on its own. In the first place the island was completely covered by

a strange down of dry grass which was high in some places, especially beside the beach. Then here and there on the low-lying northern side there were acacias, sandal trees and other plants which I was quite unable to name, since I am only just capable of telling a rose from a sun-flower. In the island's centre, however, which is higher and broken by fissures in the rocks, the trees were thicker and more robust although they were all reduced to just their trunks which appeared to have been desiccated for a thousand years and twisted and blanched by thirst. They were ghost trees. Towards the south, on the highest part of the island, other small ghost trees and skinny acacias rose out of a confusion of thorny bushes. There were agaves everywhere. It was therefore a grey and white sandy-coloured vegetation, thorny and hostile, the branches broken by the wind and as hard and rigid as antlers.

The only green oasis was just beyond the beach around the pond. The water filtered through from the subsoil, twice a day, at exactly the same time as the high tide (this turned out to be quite useful for our sea operations: we had an infallible natural clock right in front of the tent). The sea gradually flooded this shallow slimy bowl, thick with small canes of the type we had first met at Sheikh Said; the bowl was surrounded inland by a modest amphitheatre of rocks about six feet high, and on the sea side, by the beach. The rocks could only be reached, even at low tide, by paddling. They were black with humidity, and hewn out with holes swarming with countless insects and other slithering creatures. Above, around and inside the bowl the green mangroves grew, thick with leaves and so swollen with water that it dripped from the branches. Two yards from the mangroves the steppe began. The contrast was sudden.

Small and derelict as it was in the middle of the sea, Dur

Ghella was full of interest. It was lined with cracks, for example. Its rocky surface was open in places with fissures up to nine feet deep, caused evidently by violent seismic shocks both in the distant past and more recently. We had to take care where we put our feet since the smaller cracks were often hidden by dog grass.

The general structure of Dur Ghella resembled that of the other islands. The coastal formation was like that of Dissei and Cundabilu. On one side (west) the underwater terrace of sand was very short, followed immediately by the madreporic barrier and the deep sea-bed. On the other side (east) the terrace was broad and low and four times as long as the opposite side; the barrier here was less imposing and the sea-bed ran progressively nearer the surface.

Therefore the great beach of Dur Ghella was on the east, while on the west the cliffs dropped clean into the sea from a height of fifteen to twenty-five feet. In fact the sea was eating into the base of these cliffs, causing a continual crumbling away.

On the day we landed we did not succeed in pitching the tent. Both Cecco and I had pitched hundreds of tents in our time, but we could not find a space among the mangroves that night, and with the one hundred and one things that there were to do, darkness overtook us. So we slept on the beach under the humid trees, visited by advance guards of red ants, and the first Sioux. The following morning, armed with bill-hooks, we cleared a space in the mangroves. The tent was then put up in the shade, a few steps away from the rising and disappearing water, near a rock which would do duty as a kitchen table with a hole underneath for our cases of victuals (as well as several mice). Gandhi was tied by an ample cord to a branch of a mangrove, Gregory to a stake on the edge of a pond, and Coso, the little osprey, which we

actually caught on Dur Ghella during our first exploration of the island, had his nest in a large box full of straw (this he soon got himself out of, and ran around squawking under our feet).

Now our new residence was established. The immense, virgin sea lay in front of us and spring was on the way.

*

We were on the open sea at Dur Ghella, so we could dig out all our fishing tackle and exercise our fishing skill. There was no dangerous current here, as in the channels of Nocra, to rob us of our nets, and no difficulties about returning to base. The sea was calm and wide even though infested by sharks.

A methodical routine was followed every morning. Reveille at dawn, then Cecco and I took it in turns to search the island for the daily meal for our three birds. Meanwhile at the camp half a can of tinned milk was on the boil. We had a quick bite and while Giorgio, Priscilla and Tesfankièl put the site in order and got ready the various items needed for underwater work, Cecco and I went down to the sea with the boat and threw the nets. Quite often I had to dive under and work patiently at arranging the nets in the sandy corridors between the corals (how I loathed having to go in at six in the morning) in order to save them from further tears, the fish and the low tides having wrought havoc with them. With the nets down, we returned to get Giorgio, and then the three of us anchored on the reef and fished with the line for half an hour. An honest catch in that half hour was an average of thirty fish weighing from a quarter to three-quarters of a pound (the most common were small groupers and diagrams). Then we took Giorgio back to land and Cecco and I used all the fish so far caught to bait the 'coffe'

(a series of lines fixed to a horizontal cord). It was a long, boring job. A hundred hooks—a hundred pieces of bait. With that over we dropped the 'coffe' beyond the triple-net (that is, on the other side of the reef). By this time it would be getting on for nine in the morning, depending upon our humour, the sleep we had had and sea conditions. Finally we took aboard Giorgio with his cameras and Priscilla with the equipment and the food for the day and set the motor going for the zone of operation. Tesfankièl suffered from sea-sickness, so he stayed behind to stretch himself under the shade of a tree and plunge into negro meditation. (When we returned at night the supper was always ready). Once under way we let out the line with one of the victims of the morning's catch in the woof and usually, shortly after, we hooked a white fish of around a couple of pounds. This in turn was adopted as a further link in the ichthyological chain which brought us to the catch of a shark or a big grouper.

We were in the sea all day, hunting, collecting, exploring and taking photographs. Then the moment would come for us to chew the ship's biscuit with that accursed bit of tinned meat on top, handed out by Priscilla. We went back in again with the mouthful sticking in our throats. It was too hot in the sun and the best way to rest was to float on the waves. On our way back we pulled up the triple net and the 'coffe' (or what was left of them) and at sunset, loaded down with fish, coral and other animals that made the boat a stinking, slithery but valuable vessel, we reached our beach. The cargo was landed and we set about sorting the animals. The most interesting fish went into formalin, the crustaceans and the echinoderms into alcohol, and the coral to dry on the beach. Priscilla took notes. Cecco appraised the fish and put them in the chests and I carried out his orders as to throwing back the unwanted, burying temporarily the shell fish that

the beach crabs would restore to us, cleaned up, and performing any other duty that came my way. Giorgio disappeared under his photographer's dark cloth, while Tesfankièl, moaning that the spaghetti had been ready for hours and was now uneatable, managed to tell us at the same time how he had spent the day and all the things he had done. It was amazing how long he took to tell us that he had done absolutely nothing.

*

Apart from our underwater activity proper, our greatest satisfaction came from the triple nets. Unfortunately, we had only three, each thirty yards long and well made. After a month of dropping them they were reduced to shreds, torn by the coral or sawn by the tails of sting-rays, while sharks and barracudas, attracted to them by the small prey already trapped, had rent holes that would have let a man through.

Among the commonest prey in the fixed nets were the sting-rays (the common species already encountered in the flooded mangrove forest of Sheikh Said, *Sasyatis sephen*). I recall a moving episode which occurred on the sixth of March. We had stretched the nets on the beach and were going over them methodically, extracting the prisoners. In addition to fifty other fish there were about ten stingrays in the mesh. This irritated us somewhat, as the discoid shape of a stingray makes it difficult to draw them out of a net, not to mention the attendant danger of the poisonous tail, which is always ready to sting a hand. We were no longer interested in this species and they caused us to waste a lot of time.

I had already liberated three and thrown them back, dead or alive, into the sea. On freeing a fourth I noticed it shudder and apparently swell. I turned it on its back and saw a

mouse tail coming out of its cloaca. It was giving birth! The sting-ray was forcing itself to its utmost. Although unpractised in the noble art, I decided to improvise as midwife to help it. I pressed its abdomen gently, not trusting to pull the newborn by the tail—it too had the iron tip. Cecco arrived on the spot in time to take some photographs. Two little sting-rays were born, but the mother died. I was sorry. I would have put it back in the sea with at least one of its offspring. One of the twin monstrosities was in fact allowed its liberty and the other ended in formalin.

One day it took more than the usual energy to draw up the net. In thirty yards of mesh three sharks had got stuck—two black-fins of three and four feet respectively, and the other a new species under three feet long, a brown colour with a round head and close, minute teeth. In addition there were six sting-rays weighing about six pounds each, a red bream of eight pounds, half a grey-skin (the other half must have been guzzled by a shark), and finally about fifty small fish, many not previously encountered. The whole catch was weighed down by blocks of coral uprooted from the sea bottom and firmly enmeshed. If I am not mistaken, this was the day that our triple net received its *coup de grâce*.

We were repeatedly amazed to find sharks trapped in the triple nets, and we found an explanation of the phenomenon by sheer chance. We observed that sharks were caught in the net at a particular time, at the time of the movement of the tides. We deduced that the sharks approached land at high tide and returned with the fall of the waters. On the way, coming or going, they found their path blocked by the mesh. But why did they not go a short distance to one side and avoid the trap?

One day, Cecco and I went under in masks to make an inspection of the submerged net. The net had been let down

an hour before and so had had time enough to imprison a fair number of victims. There were already a dozen coral fish, diagrams and small groupers. Suddenly we noticed the net shaking slowly as if some force at the far end were pulling it. We swam hurriedly along the land side of the net imagining that a shark was pulling at some fine bream or greyskin trapped in the mesh. After twenty yards we stopped to watch an extraordinary scene. A small black-fin was trying at all costs to make his way through the net. It was high tide and the mysterious call of the shallows was urging him on. The black-fin banged the net with his snout, pushed, retired and returned again to push. We kept quite still, intrigued at the show. Then the shark twisted furiously. The net shook violently. He pushed and got caught by the gills in the first mesh. But the first mesh is wide. With a little patience a cunning fish could easily liberate itself and get away. But fish are impulsive creatures. They have just to be touched on the neck and they go mad. Instead of trying to go back they push on. The shark did this. It was terrified and drove itself further and further to its end until it was caught and muzzled by that mortal thick net in the middle. And still it pushed itself on, until it had the third net round it too. When we dragged up the net immediately afterwards to save it from further tearing, the shark was still making its last desperate exertions. One can only conclude that, faced with the most commonplace trap, the pirates of the deep behave as stupidly as the most vulgar, blundering rock fish.

It was a different story with the 'coffe'. They were reduced to a pitiful state after seven or eight throwings. Of a hundred hooks, fifty per 'coffa', ten or twelve remained. And when the reason for this dawned on us it was already too late. We had been leaving them in the water too long (all day, and worse still, overnight). Breams, barracuda, groupers, kingfish and

perhaps tunny had bitten early, but soon after, these in turn had been pounced upon by small and big sharks (or other barracudas or large groupers). They carried off their choice of fish, the hook and a good stretch of line as well. However, in the short time that we used the 'coffe' we hooked some interesting bream that are not common in coral shallows.

Both the 'coffe' and the triple nets delivered about one fifth of the normal haul as soon as the monsoon arrived and the sky turned grey. But when this passed and the weather was bright and calm the fish were caught again in abundance.

*

When the water is clear, the fall of the coral reef to the west looks quite vertiginous. It plunges into a watery void and you feel you are being drawn down into an open abyss. And, as at Dissei, it is a moving wall, teeming with life.

It is a wonderful experience to survey the depths from the brink of the precipice, secure, yet anxious nevertheless. A long surface swim on the rim of horror fills the mind with images and whirling fancies.

Near that coral wall shoals of multi-coloured fish appeared in their thousands. Unexpected shadows sprang from nowhere—the silhouettes of sharks. Swarms of silver, round pampano with a terrified expression on their faces arrived intermittently. Two or three big mackerel passed by like meteors. Down below images of striped marine cables slipped by—barracudas with fang teeth. The entry to that abyss was a proscenium where an endless line of fantastic characters entered and made their exit. The fish came from all directions, from the land and from the ocean, but they usually followed the length of the wall. Sharks came without warning, behind our backs, and overtook us with studied nonchalance,

watching us only with one eye and swimming incredibly slowly as if carried along by the current or by a mysterious levitation. The small ones up to five feet long were not so intimidating, probably because they had no clear idea of what they wanted to do and travelled along like wriggling serpents poking their snouts to left and right. But the big ones could have been torpedoes or dirigibles. When one of them passed slowly and silently by I was always left with a feeling that perhaps after all it had been a hallucination. I suspected marine ghosts every time.

On one occasion I decided to go down to the foundations of the wall. I went under vertically after taking a long breath. My first visit lasted almost two minutes. As I went down the madrepore gradually changed to yellow, then became darker still until the indigo of the depths absorbed and dominated every colour. I came to the sandy bottom and to the last pieces of coral that had fallen from the wall at about sixty feet under. I began to search and look around. A tribe of big, mysterious fish moved slowly in the shadows, a little disturbed. A fine, big pampano came across me and flew off in fear. A grey shark hung around at a distance and then made off . . . but to the right of me, I saw two immense shapes rise up from the bottom and turn round and round. I swam up to them and found myself a spectator at the courting of two rays. Neither of them could have weighed less than a hundredweight. It seemed odd to be down there in the dark, with sixty feet of water above me, witnessing the ceremony of the declaration of love of two monsters. I was surprised to find them so refined and graceful and having such undulating rhythmic movements.

I went down to the bottom a hundred and one times, with and without the breathing apparatus. I used to hold on to a piece of rock on the sandy floor of the second lower shelf,

from where I could study the further slope of the sea bed that sank into the depths. I saw the biggest rhinoceroses walking through the marine park looking like babies' prams; watched mackerel catch dead fish that I threw down to them, in the way that seals catch titbits at the zoo, and discovered the trails of molluscs and coloured worms. I noticed how bored the sharks were as they lounged around in their unchanging world of water and fish, fish and water. One day when I floated up to the surface I received a surprising escort from a gathering of small fish of the brightest blue with an orange band on their bodies and an orange tail, about as long as a hand. There were hundreds of them. I could not see at two yards and they circled round me in a gay roundabout without touching me. In this way they accompanied me to the surface. I kindly fell in with their wishes and sat on an underwater rock. There I became a monument, a submerged cathedral with a cloud of frenzied swallows flying round me.

*

I had left aside the underwater gun for too long, which was all very pleasant but not very serious. We were out there to look, discover and get to know things, but above all we had undertaken to capture specimens. So I gave the gun a good greasing, changed the worn-out line, had the harpoons welded to the arrows and returned to the kill with a double-spring charge.

The hunting instinct was as much inbred in me as it was in Cecco and we were more than ready, after the interval of observation, collection and underwater photography, to get back to battle.

On the first day of hostilities we laid down a precise plan of campaign. Giorgio would throw one or two bombs and

Priscilla would collect the victims, assisted by Giorgio, Cecco and me. My main task, however, was to lie in wait with the gun, for the big fish.

It was an extraordinary day. When we got back to camp in the evening the boat was so full of fish that we had to put our feet on the seats. It took us two hours to sort them out and we realized that in a single drive we had obtained two or three specimens of each of forty different species, some of them as yet unknown.

There were several episodes worth relating.

First episode. Giorgio had thrown his bomb some time since and the collection of the casualties on top and below had been going on for more than an hour. Strangely enough, only one shark had so far shown his face, a modest black-fin. The wild mackerel had been eating up half of the prey. Cecco had shot one and said good-bye to his arrow and three-quarters of the line. He was now in the boat fixing a new arrow and line. For the moment I alone was in the water watching the movements of a barracuda which had been timidly coming up to me behind my back. I waited for the right moment and went under with my finger on the trigger. The barracuda unexpectedly put on speed and slipped away. In its place three black-fins arrived as if by magic. One of them was longer than me. I floated quietly up, breathed in and returned below to see them snapping up the few fish that had not yet been collected. They darted to and fro, beating their tails, all of a twitter. Perhaps they had decided to press on because they saw that there was only one human in the neighbourhood, or because they realized that they had arrived late or perhaps they were just terribly hungry. Anyway I liked the look of the big one. I tried to place myself in its path. It made the customary curve away from me and appeared on my right. According to my calculations it

should pass me now, lower down at a distance of three yards. In fact three yards lower down a drunken diagram was coming out of a hole. It shook and waggled at the waist at half-depth. The shark would doubtless come and gobble it up, I thought, so I decided to wait there to nip it in the neck. Stock still, waiting, with the gun aimed at the diagram, I watched the approaching shark out of the corner of my eye. I could see it clearly. It was coming straight and fast. I would give it another three seconds. . . . When I think back at what happened a shiver goes down my spine. The shark, not born yesterday, instead of passing in front and below me passed exactly a yard above me and then made off.

Second episode. We had thrown a new bomb right on the edge of the reef. In the fissures of the barrier wall we had noticed numerous minute fish that could not possibly be taken in any other way. The gelatine charge was quite small and operated over a range of four to five yards. But at the very moment of the explosion a squadron of small scombrids passed through the danger zone and many of them stayed behind. Twenty lay on the slopes of the madrepora. The bigger mackerel pounced on them like silver darts. Cecco snarled and charged in revenge. But in his fury he missed every time. The mackerel in any case slipped through in zigzags, either to reach the prey first or because they were afraid of us. Luck alone allowed me to stab one full on. It retired and twisted itself with spectacular energy but finally the match was mine. It weighed a little more than sixteen pounds.

I was never attacked by a shark, a manta, a barracuda or a moray—at least seriously. But a mackerel did attack me.

I hit it in the flank almost at the bottom of the barrier forty feet down, and although not a vital point it made no reaction. I did not trouble to catch hold of it, and went back

to the surface dragging it behind me with the line, thinking that perhaps I had paralysed it. Suddenly, nine feet from the surface, the mackerel shot up from below at a terrific speed and charged me with its eyes shut. I just managed to protect my face with my arms when it hit my head with its snout, turned my mask over, twisted, and hit me on the hip with the arrow sticking in it. 'Now, I'm going to drown,' I told myself. When I had succeeded in emptying the mask of water (the glass was miraculously intact) I looked around expecting a new attack—only my gun hanging from a spike five yards below was to be seen. The mackerel had gone, but the harpoon was in its proper place. One of the two wings had been broken and the one remaining still held a piece of flesh.

Third episode. This happened in exactly the same spot as episode number two and not more than half a minute later. I just had time to stand on a coral pinnacle with my head barely out of the water, and adjust my mask. I bent over ready to dive in to retrieve my gun . . . and a shark, not a black-fin but something fairly impressive, scraped past under my stomach, sending me nearly spinning, snapped up one of the little scombrid corpses and flew away as it came, like lightning. I had not noticed that little scombrid lying a yard from me. In any case there were dozens of others knocking about. It just had to have that one.

I got the gun and went back to the boat.

CHAPTER 15

VISITORS FROM OVER THE SEA

ONE morning at Dur Ghella I came out of the tent at dawn, stretched my muscles, and made for the beach with sleep still in my eyes. We used to wash in the sea and take that pleasant walk along the water-front while we were still only half awake. The sun was gentle and the sand was soft and virgin except for the touch of the birds.

But that morning I stopped dead as soon as I emerged from the mangroves. There was something moving on the sea. And not something belonging to the natural world, but something man-made. Away across the sea there was a sail.

I called the others. In an instant we were all there gazing open-mouthed. For days and weeks the only vessel that had crossed the waters of Dur Ghella was the *Formica*, and that not very often. Furthermore, Dur Ghella was off every route, outside the world. Our astonishment was still greater when we saw that the triangular sail lying across the hull and scraping the water so closely that it hid the boat, was heading without any shadow of doubt towards Dur Ghella, and exactly towards us.

'My goodness!' Priscilla let out.

'Teskankièl!' Cecco shouted, as if Teskankièl was not there too, watching that sail. 'Teskankièl, do pirates still exist in these waters?'

'Pirates? What are they?'

'Bandits, brigands, people that kill. *Scifta!*'

'Ah,' it dawned on Tesfankièl. 'Sure there are. Always have been. Not so many now. But they could be pirates.'

'And what do they do around here?'

'Steal and kalàs.'

'Kalàs what?'

'Kalàs your head.'

'I'll give them kalàs your head,' I grunted.

'What do you say we do?' Cecco asked me.

'Nothing. Let's get the guns and when they arrive you and I will go and meet them.'

'O.K.'

The sail was coming in. It was about a hundred yards from the beach now. There were four men and a boy on the sambuk. Not too many for a brace of guns. Oh ho! Wait a minute. Another identical sail appeared unexpectedly to the north with a full wind astern.

'That's done it,' Cecco murmured.

The second sail was making for us too. As it turned we counted the crew: six plus a boy. Six and four's ten plus two boys makes twelve. Cecco had five bullets in his Browning and I had nine slugs in my Beretta. Five and nine's fourteen. Well, it was in our favour.

'Then in all probability they are fishermen,' I chirped in.

The sails dropped. The *sambuks* were one hundred and fifty yards from our bushes and were coming in to land. The men were as quick as monkeys. They jumped overboard and started managing the long thin vessels which appeared to have been carved out of whole trunks. In a moment they had moored them and were coming on to the beach. They were different from the usual run of negroes. Some of them were wearing the open tunic of the Arabs and almost every one

was wearing a turban and had a black stump of a beard. But apart from one or two big knives at the waist, there was no sign of arms.

'Shall we go?' I asked Cecco.

'Right.'

We came out of the mangroves and went straight to meet the twelve. We held the guns across our shoulders to indicate our good intentions, but they were loaded and the safety catches were off. Our visitors were not aware of us until we were fifty yards from them. That was a good sign. If they did not know we were there they had not come to Dur Ghella just for us. When one of them did notice us, it was with surprise. He immediately told the others and they all turned to look at us. Those last fifty yards were difficult. Cecco and I smiled from ear to ear and I am sure that at that moment we had the most stupid faces in the world. The twelve did not smile at all. Not a sign.

Finally, we were right up to them. We kept carefully to one side.

'*Buon giorno,*' Cecco began, trusting in an African-wide knowledge of Italian.

The negroes, who were tall, well-built and handsome, did not flicker an eyelid. They stared at us. One of them, seemingly the eldest, articulated two incomprehensible words.

'Good morning,' said I, trying out my English, and touching my forehead and heart as the Arabs do.

All the negroes muttered something and touched their foreheads and hearts.

'They are Mussulmans,' I said to Cecco.

'But they don't understand a word.'

'Fishermen?' I asked, going through the movements of drawing in a net.

No result. I made signs of fishing with a hook.

'*Heova!*' one of them shouted (we discovered later that he was the chief but he dressed the same as the others and worked harder). Then he burst into a dry laugh and repeated my gestures. Everybody shouted '*Heova!*' and drew on the sand. The ice had been broken and we had made friends.

Thus Italians and Yemenites (for that is what they were) came together on that flea of an island for five days. They became associates and brothers. They told each other about their families, their homeland and their economic troubles. They exchanged news on different topics, they advised each other on various matters, such as fishing, eating, finding turtle eggs, making love, how to look after one's wife, reverence for God the Father—and all this without understanding one word of each other's language. The Yemenites demonstrated and explained every trifle with generosity—proof of their civilization.

Our technique of conversation consisted of three forms of expression: drawings on the sand, gestures (by far the most effective form) and laughing. Even Tesfankiël decided that the Yemenites were speaking Double-Dutch. The only word that we learned from them was '*heova*' which meant many things—yes, all right, agreed, go ahead, best wishes, naturally, and so forth. As for them they learned *si* and *spaghetti*. They already knew *pescecano* (shark) but pronounced it *pescecan* (all over the Red Sea Egyptians, Dankals, Eritreans, Arabs and Sudanese say '*pescecano*')

Those men who had crossed the Red Sea in sail-canoes, probably learned more in those five days than in all the rest of their lives. And we discovered one of the hundred ways of living in this world in humility. Far from being pirates, they were saints.

They had left their country, the Yemen, many weeks before. They would not see their wives and children and

parents for months. They would hook fish and sharks with their lines until summer, drifting around the islands of the archipelago according to the winds and the occult rules of fishermen. They would sleep on the beaches, and fish every day that the weather was good. Then every ten days they would go to Massawa and sell their catch at a discreet price to an Italian middle-man. After reaching and sharing a certain financial figure, sufficient to keep their families for another year, they would go back home across the Red Sea again, in the hope of finding everybody well, or at least alive.

Their habits and customs were strange. They used to sleep in the open in separate beds which were big envelopes of woven fibre. They lay on the ground, got inside the envelope and pulled the flap over (just like a long postal envelope). I never understood how they managed to breathe. When they ate they gathered together in a circle. A boy from each group (the groups were in fact quite independent in every respect and only moved across the sea together for reasons of collective security) made every evening a frightful mixture of black bread and water, added some fish heads and tails that were more or less roasted, and stirred the whole mess with his hands. When it was well mixed it was served on an earthenware plate. The diners, squatting Arab fashion on the ground, dabbed their hands in discreetly and gathered a handful of the hash. They rolled this slowly into a sausage shape and then placed it on their lips, sucking in and cleaning their fingers at the same time. Then they moved straight on to a dish of little pieces of burnt fish and circled back to the potage. I must confess that this is the most unpleasant memory I have of the Yemenites. We used to be together every evening. We talked about the day's catch and exchanged generous compliments, always using the *ars eloquendi* I have described.

These good fellows were amazed at the various wonders in our camp; at the sight of them they would laugh, hit each other on the back and follow our movements with an almost foolish concentration. When we returned to the tents in the evening they would all be waiting there at a respectful distance. They knew that we were about to unloose with a magic touch a flame that would go up and down at our command and that we would make tea in a couple of seconds. They knew that at the first onset of darkness, Cecco would light a powerful lamp that could be regulated (they themselves did not even use candles). They knew that Priscilla would paint one of the fish that had been caught during the day. And they did not want to miss the show. The miracle of painting, above all, visibly shook them. As the picture took shape stroke by stroke, the comments of the Yemenites would get more and more excited until when the last touch on the eye was given, bringing the fish to life, they would explode with a 'heova' that was fit to split the eardrums.

The things that amazed them most were: the photo-flash (the first time we photographed them at night, they all fell flat on the ground as if they had been struck by lightning; to satisfy them we had to flash five or six more bulbs on them; the two boys flung their legs into the air each time); our Rolex watches whose pointers still mysteriously moved underwater; the gas stove; and the electric torches.

One day, three superb white-bellied storks came to Dur Ghella. I took my gun and invited one of the Yemenites to follow me. When he saw me crouch, lift the barrel and go boom, and the stork in consequence drop dead fifty yards away, he took to his heels at breakneck speed across the island and dragged all his friends to see. They looked suspiciously at the stork for a good ten minutes. That hole of

blood on the breast filled them with the deepest dismay. I was not sure whether they had never seen a gun before or whether they had just never seen one being used.

They were less excited at the underwater exhibition of Cecco and myself. They watched us from the beach while we dived from the reef in front. In not more than a quarter of an hour we landed two pampano, a small grouper and a moray. One of the pampano and the moray were still on the harpoons when we presented them to our friends. Their eyes were wide open. They beat their chests and examined the moray with particular attention (evidently they did not know it well, even though it is one of the most common fish on the reefs). They studied the harpoons meticulously, but were not as impressed as we had anticipated.

They in their turn amazed us. They asked us if we liked turtle eggs. We told them that we had never tried them and that in any case we did not know where to find them. This last revelation made them laugh sympathetically. Under the sand that we had been tramping over for the past two weeks there were without doubt some six to seven hundred eggs. We did not believe it? Just you watch! Then one of them armed with a stave began walking slowly along the coast, slightly inland, spying out the secret signs on the sand. He walked like this for twenty yards then suddenly stopped, dug the stave slowly in, apparently found a hollow and withdrew it. The end of the stave was covered with yolk. He knelt down and dug with his hands for about a foot . . . and a dozen golf balls came to light. But the more he took the more seemed to be lying below. It was like a conjuring trick. Finally he took out a hundred, although only just over half of them were good. The ones from underneath at a depth of three feet, were irregular, small and without yolks. The Yemenites showed us how to find the deposits. You have to

look for slight swellings of the terrain and for sand that has been moved. Then you dig your stave in and wait for yolk on the end. We found most of the deposits the same, in that the upper layer contained the edible eggs—the most recently laid by the turtle on a calm night—while lower down there were the unfertilized ones.

The Yemenites glutted themselves with turtle eggs. They said that you could only eat the yolks (there were two whites, one more liquid than the other). We tried making an omelette, but remained faithful to the modest, honest work of our chickens.

The second demonstration of the ancestral wisdom of our friends was their quartering of sharks.

In addition to the forty-odd fish weighing from two to twelve pounds and ranging over red breams, pampano, tunny, barracudas and groupers of different kinds, they caught an average of two sharks a day. These generally measured from three to four feet, but sometimes they landed bigger specimens, as long as nine feet and weighing several hundredweight (grey sharks and white-fins). The other fish were gutted and stored immediately in a big wooden chest in the middle of the *sambuk*. This chest was stacked with ice bought at Massawa. The ice was kept inside matting, but as it disappeared and the fish began to burst forth from the chest, the Yemenites rushed back to the market at Massawa.

The sharks were slit, gutted and cut into sections. The quartering of the sharks took place on the beach in the dark when the rest of the work was done. The light of our lamp was highly appreciated. The chief was the butcher. He may have held the office as an honour, but it was more likely that he held it because he was the most skilled—besides he was the man who caught them. It was hell's own job. He started at the fins, sticking a rough knife in, rather like a cobbler's

knife. With a groan combining strength and fury he cut the fins off at their bases, followed with the tail and then the head (at this point every muscle and a series of groans were used). Then he opened the belly (if the beast was a big one he had to stop here, almost exhausted and covered with sweat; an assistant would give him a new knife and the original was sharpened by a boy on a special stone). With the shark gutted, the Yemenite would carefully extract the precious liver and place it safely on one side. Then he finished off the carcass, cutting it into blocks. These were then put into the chest and would be highly esteemed by the Massawans as 'slices of select fish'. The fins, on the other hand, would be dried and sent off with the first cargo for China (for the famous soup).

To do the whole job, and I timed him with a watch, the diabolical Yemenite took thirteen minutes on a grey shark measuring seven feet and weighing about three hundred-weight. Any one of us using the same slicer (with which we should immediately have amputated a hand or five toes at least) would have taken an hour.

The fishing tackle of the Yemenites were the hook and line and a cudgel. The hooks were straight and the same size as our tunny hooks. Rough-looking as they were, they did their job perfectly. We made a present to them of some of ours and they were delighted.

We saw the cudgel in action on the great day when we decided to go out fishing with them.

*

In the first light of day two Yemenites crossed the beach. One of them carried a small circular net and the other had a basket. Suddenly the first one caught sight of a shoal of

pilchards in-shore. He entered the water up to his knees, threw the net in a wide sweeping circle, then drew it in, low down and in the centre. He lifted it out of the water and brought it to land. His companions offered him the basket and some twenty to thirty fish slipped in. This operation was repeated a dozen times until the basket was full. With this, the bait had been caught and we could leave.

Off they went in the *sambuk*, the *nacuda* at the tiller, the men singing a mournful song in chorus. The sun was blazing. We came behind with the engine. After reaching a bank, three miles off-shore and one hundred and fifty feet deep, the fishing began. After an hour the *sambuk* was swarming with fish of the most magnificent colours, among them some white and blue fish—shark bait. The Yemenite chief changed lines and took the ceremonial one (different from the others simply because it had a bigger hook and the cord was thicker). He dropped in a little tunny and the battle against the great adversary had begun.

The bait had to be fresh. If after two or three castings the shark did not bite, the fisherman changed it, drawing a new one from out of the indescribable living confusion of fish that floundered in the bottom of the *sambuk* in a mixture of sea water, blood and melting ice. Then he threw the line again, tying a stone to it this time (there was a supply of stones on the *sambuk*) so that it went down quickly and reached the deep haunts of the shark without being fingered on the way by an uninvited ruffian. Then he freed the line from the stone with a jerk and began his work of invitation, persuasion and mellifluous flattery, while his own tremendously barbarous face turned into a pure incarnation of suavity, hypocrisy and superfine diplomacy. It was hypnotizing.

I was by now on his boat, elbow to elbow with him as he chewed over the words of a monotonous song which certainly

hypnotized me more than the shark sixty feet below, unless the line carried that atrocious flattery to the fish. The master garnished his invitation by holding the line with a delicate touch and staring at the water with beaming eyes. The line was obviously transmitting thoughts, apprising him that the shark had now been tempted and was getting bolder. The Yemenite dropped his arm into the water, stretching himself and hanging over the gunwales so that his intended victim might find the titbit that he had been sniffing with his snout now lying level with his jaws, and decide now . . . to . . . bite . . . and with a dizzy leap into the air he hooked it, dragging the line flying over his head. If the hook was unsuccessful he did not get annoyed but broke the incantation with a smile, changed the bait and kept on smiling. But if he did hook it, a spectacular battle followed.

He would let out ten yards of line in a flash and then take it in, slowly, inch by inch, a bit at a time, holding, feeling the weight, then wildly draw in yards, stop, resist for a moment and let a little out. He was a rope dancer, a variety turn, the gratified soloist who had found his public.

When it had lost the match, foot by foot, over a distance of sixty yards, the shark erupted on the surface lashing out with its tail and biting the air, twisting mad with terror and rage. This was the most difficult moment, because the fish was no longer on a vertical line where it could be controlled. The Yemenite himself broke out into firework movements like a maniac. He shouted, jumping on to the ice chest and down again on to the deck, continuing shouting in that gibberish of his without losing a point. Worn out, the shark ended up under his feet swamping the boat with its tail. At that stage the Yemenite stooped behind, picked up his cudgel which was as hard and as heavy as iron, and whanged the shark three times on the skull. The tragedy was at an end.

CHAPTER 16

NOT ALL EXPERIENCES ARE USEFUL

I HAVE chosen the following episodes as the most interesting that occurred at Dur Ghella. Some are concerned with underwater activities and some with politics. The final one is in a class of its own.

The characters of the first episode are three: a black-fin, a remora and me. The remora was adhering with its sucker to the belly of the shark which was slowly approaching the reef. The shark measured about five feet. I was watching not far off on the reef, although paying little attention to the remora because these parasites are quite commonly attached to sharks (I would say to one in five). The black-fin saw me, stopped and avoided me, passing slowly in front, almost touching the reef. The remora suddenly detached itself from the black-fin and dropped to half-depth to eat something which I was unable to identify before it was swallowed. I had hardly had time to absorb this display of the remora's parasitic and predatory habits than I began wondering what it would do now that it was aground. The malignant animal—not more than eighteen inches long—could barely have had time to guzzle its snack when it rushed back to its laid-on transport. Like a fool, the shark realized too late that it was relieved of its passenger and shot ahead in an effort to get

rid of it for ever. But the remora was satanic. It deceived its host with a twist and blonk!—it was once again glued on. The shark went on its way with a pitiful expression on its face and with the triumphant remora waving like a flag.

*

To mistake a shark for a tunny—a thing which is easily done—is one way of avoiding anxiety.

One day, His Excellency the Head of the Eritrean Government, Tedla Bairu, joined the *Formica* on cruise. It was simply a friendly visit. He wanted to see these odd Italians at work underwater.

Tedla Bairu was most impressed. He wanted to have a try himself, at least to swim with a mask on, so into the water he went, accompanied by Raimondo Bucher. Bucher set about showing His Excellency how to go under. He ducked and disappeared. At ten yards distance he stopped and looked up. Between himself and His Excellency a pretty, nine-foot shark was swimming by. Raimondo went up in a hurry, expecting His Excellency to faint in his arms.

Tedla Bairu: 'Stupendous, that tunny, wasn't it?'

*

On another occasion, the Viceroy of Eritrea, the Bituodded Andergacciou Messai, was on the *Formica*, accompanied by a dozen and more ministers, military officials and other dignitaries. In addition, there were the soldiers who, while they were not numerous, were enough to turn the *Formica* into a sort of landing assault barge.

Priscilla, Cecco, Giorgio, Tesfankièl and I were still at Dur Ghella. We saw our dear ship arriving, flags flying.

'Where's the washing come from?' said Cecco. Flags do not impress him.

We drew alongside the *Formica* with our boat. As usual, we had to take on replacements of food and water and all other necessities (cigarettes, formalin, spare harpoons, air for the respirators, etc.) not to mention the post from home. In addition we had to consign to the *Formica* two chests full of animals, and various phials containing micro-organisms collected from the sea, the pool and the grottoes. Cecco and I were in working slips, that is to say, practically naked. We were also rather dirty, with a two or three days' growth on the chin and we were shouting our marine greetings and orders for this and that like ruffians. On the *Formica* there was an unusual silence. Bruno's face appeared over the ship's side: 'For heaven's sake be quiet, the Viceroy's on board!' Cecco and I looked at each other.

'So what?' said Cecco.

'You could look a little more respectable, couldn't you? How can I present you as the scientific research side? We've come specially to show you at work.'

'You won't take him to the camp, will you?'

'I'll have to, of course.'

Cecco and I turned pale. Then Cecco became diplomatic and smiled.

'No, Bruno, look, I think it would be inadvisable . . . the camp isn't really in order. . . .'

'I'm sure it isn't, looking at you lot.'

Cecco was offended.

'I'd like to put you on this dump of an island for two days and then see if your face was well shaved. Do you realize that we haven't even got any soap?'

'But I gave you a new piece last time, didn't I?'

'The Sioux whipped it.'

'The what?'

'The crabs.'

'All right, well shut up now. We'll give you the stuff and then go by with the engines right down.'

'Ah ha! *Les voilà! Donc nos savants!*' Dammit, the benign and smiling face of His Excellency the Viceroy came up alongside that of Bruno. Bruno's whiskers tightened perceptibly.

'*Oh, Excellence, ils sont si fatigués, si fatigués que . . .*'

'*Ah ha! Magnifique! Je veux vous donner la main. Montez, montez!*'

We went up. We felt rather bare in our slips. We made a dozen or more painful bows. The Minister of Agriculture asked in good Italian for information about the vegetation of the island. The Minister of Education assured us that for that promised show-case of biological material we had already got some good examples. His Excellency, the Viceroy, followed us with beaming eyes and manifest satisfaction: *ah ha! ces Italiens! . . .*

*

As well as playing water basket-ball with a balloon fish in the Red Sea, I also had a game of football with some odd fish about the length of a finger.

They swarmed along the beach about a yard away from the water's edge. I noticed them one day, and decided to catch at least one, since we had no specimens of them. I tried with the shrimp net, but it was too far gone to be of any use. I tried with a stretch of triple net but they slipped through the lot in a wink. So I got more violent. I took up my position and waited for the arrival of the shoal. When it came I jumped on them and lashed out with my feet, kicking in the direction of the beach. Most of them slipped off to safety,

but some were taken by surprise and went flopping here and there with me behind them, kicking. Finally a small wave came to my assistance and with a well-placed shot I scored. Two tiddlers landed on the beach and I followed with a goalie's dive.

*

For the uninitiated, tropical waters mean sharks and octopuses. Octopuses are the second essential theme of travel books, novels and films dealing with coral reefs and the 'South Seas'. It is therefore mortifying to confess that there is barely half an octopus in the Red Sea. It is sad but true.

This might at first seem strange, because the neighbouring waters of the Indian Ocean appear to be full of these kraken. But it must be emphasized that even the insignificant small octopuses are rarely found. (The writer saw the only 'giant' octopus of his life—perhaps forty pounds—in Calabria.) In the course of our explorations we searched intently for at least one small example of these cephalopods—but in vain. I had hoped to find some when I examined the Italian ship *Urania*, scuttled in Ghubbet Mus Nefit during the last war to save it from the hands of the British. This enormous ship lies on its side near the coast in about thirty to sixty feet of water. A great deal of the bridge and port side is out of the water. Enza and Raimondo Bucher, Folco, Giorgio and I gave the entire construction a good look-over. It was an impressive sight. The plating that had been twisted by the explosion was covered with gorgeous coral fungi and iridescent molluscs slithered across it. Coral fish swam like butterflies over a ruined temple. I looked for my octopus in all this glory, but remained empty-handed.

We do not know if previous expeditions to the Red Sea found octopuses, but we do know that the recent French

expedition on the *Calypso* reported in terms of surprise that none had been found. The fact seems all the more strange as it is not known what obstacle prevents the survival and reproduction of these animals, found in so many other parts of the globe. I would suggest that octopuses are rare in the Red Sea because of the superabundance of groupers. It is a well-known fact that the main food of the grouper is the octopus. It would be interesting to carry out comparative observations with specified areas of the Indian Ocean.

However, one day at Dur Ghella, Folco quietly called out to me, as if it were the most natural thing in the world:

‘Come down here. Looks like an octopus.’

I shot out of the boat . . . and it was true! It was shrivelled up on a coral rock, perfectly camouflaged, about two pounds. I made a grab for it (with my hands, so as not to ruin it) and it squirted a cloud of extraordinary thick ink. It came in a steady jet, a brown colour that darkened the water for a good square yard. However, I got it and took it triumphantly back to the boat. Then I examined it with loving care. It was different from the Mediterranean variety. The external anatomy was roughly the same, but its colouring was more striking, ranging from bright red to violet. The skin was very wrinkled as if to reproduce the scaly surface of the coral. In addition the uniting membrane of the tentacles was extremely strong.

Two days later, in the same place, I saw another one twice as big, and beside it a third one. I attacked the second one (this time with the gun because it was escaping into a crack) and once again I was amazed at the protective squirting—five or six times greater in volume and length of emission than that of the Mediterranean variety. But there was only one discharge. I kept that octopus underwater for about another half hour, but it did not squirt again.

Folco wanted to take some photographs in natural surroundings, so he placed the octopus on a sandy patch near a block of madrepora. In less than a minute a fourth octopus came out of the block, slowly and cautiously. We stayed to watch. The fourth was the same size as the others. It drew up to its kinsman pierced with the arrow, felt it, took it by one of its tentacles and began dragging it into its own nest. If we had not stopped it, it would have robbed us. Did it want to save its kind or put it in the cupboard and dine when ready? We tried putting the captured octopus in the same place, and once again the fourth one came out of its nest, felt the victim, took it by the arm and began dragging it back into the hole. Both Folco and I shot a complete photographic record of this strange affair.

Anyway two octopuses ended up in formalin. Two observations led me to connect the rarity of octopuses in the Red Sea with the great number of groupers. One is the quantity of ink that they emit: this highly intensified method of defence suggests to me greater survival difficulties. Secondly, the four octopuses that we discovered were not near the reef but among the scattered blocks on the terrace. It is known that groupers live exclusively on the reef and never on the terrace in front.

*

Sailors say that when the Devil has a hand in things there is nothing to be done. For negroes this is absolute dogma. It is dogma now for Folco and me.

When the *Formica* used to come to keep us going with supplies at Dur Ghella two people, Silverio and Gigi, presided over operations with notebook and pencil. On this particular day neither of them was present. Silverio was in hospital at Asmara with otitis and Gigi was in hospital at



33. This girl sold me some 'papaia' and showed me the way to eat them.

34A. A coptic priest and his disciple
come to visit the Formica.



34B. Sheikh Serag with his small
daughter (my beads are around her neck)
as we said goodbye at Gembeli.





35. *This Yemenite chief showed us how to discover turtles' eggs hidden under the sand.*

36. *Sheikh Serag disembarks from the Formica on her arrival at Dahlak Kebir. With him are his two heavily veiled wives, his daughter between them and his son at his side. A servant rows.*





37. Out of this 'agudo' at Dahlak came two native children, but only after much persuasion from us. Their mother, despite the tinkle of bracelets and necklaces offered by Tesfankiël, refused to emerge. On Dahlak, the white man is often considered dangerous.

38. Our special friend
Sehil. In background
the island of Dissei.





39. Another morning's catch. Baschieri holds a small black-fin; I hold a tunny and a pampano; on the ground are the fish caught by line; still to be collected are those in the nets. In the boat is Tesfankiël.



40. The Yemenites in full swing at Dur Ghella. Their tremendous art and skill in handling the line left us speechless.

Massawa with his leg. Cecco, Giorgio and Priscilla had gone off to Massawa, leaving me with Folco and the other voluntary Robinson Crusoe, Tesfankièl. Folco did not know a thing about camping and trusted blindly in me. And as I had several other jobs to attend to I entrusted Tesfankièl with the provisioning. When the *Formica* told Tesfankièl that they would be back in a week, for some unknown reason he understood them to say 'within three days at the most' and so took stocks for 'three days at the most'. The *Formica* calmly came back in a week.

But that is not all. When we were completely without food (except for a box of spaghetti, which was useless anyway because we had to keep all the water for drinking purposes) a storm arose at sea, for the first time since we had come to these waters. We had to drag the boat up to the level of the trees so that the white horses would not carry it off, and we could not fish for food in any other way. Dur Ghella is so small that it was hit by the waves from both sides.

On the fourth day, under a choking, saline wind, we imagined that the *Formica* had been held up by the storm. On the fifth, peace reigned again and we began to have doubts. (The temperature was over 100° in the shade and we were on a ration of a pint of warm water per head.) On the sixth day we began to stare at each other: 'Perhaps the *Formica* has gone down. Nobody knows we're here. We'll end our days here.' We ate lobster and then nothing else so as not to encourage our thirst. On the seventh day the saline wind blew up again. Folco got some sand blown in his eye and developed a thoroughgoing conjunctivitis. At this stage we had not a drop of drinking water, no bread, no fruit, sugar, cigarettes—nothing. I thought of catching a fish just for the juice . . . but the monsoon returned bringing with it the storm at sea. 'If the *Formica* does not come tomorrow

we'll leave in the boat. There's hardly any petrol, but there are the oars. Weather and sharks permitting we could reach Massawa in two days.' The sea calmed down in the evening. We had a dip to cool ourselves off. We drank some drops of sea water and I managed to catch a pampano, which we roasted that night even though its meat is disgusting. Afterwards we made the mistake of sleeping outside the tent to be cooler. We witnessed an incredible spectacle. It did not rain, it did not become much more humid, but the mangroves went black and began to sweat. Soon, sticky water was dripping from the branches, and at the same time, a shower of thousands of black, clammy insects dropped. They dropped half dead into the camp. Our hair and necks and ears were crawling. It was repulsive. We escaped to our tents and hated Africa with all our remaining strength.

On the eighth day the *Formica* arrived.

CHAPTER 17

THE DANCE OF THE MANTAS

TROPICAL Africa eats, grows, dies and regenerates in jerks. The chrysalis explodes into a butterfly under your nose. Nature changes by revolutions. The gentle transformations of the temperate latitudes are unknown.

I saw a peach-tree at Asmara, five thousand feet above sea level, which reminded me of the religious allegories of the Middle Ages. Some of its branches were dry as in winter. Some had buds. Some carried broad, green leaves, others small bitter fruit. And there were in addition ripe peaches and peaches in decay. That tree had no seasons, no sleep, no rest. All the trees of Asmara and high Africa lack a sense of time. They are Hegelian trees in a state of becoming.

But while that peach-tree flourished and died on the same branch and with the same lymph, down at Dur Ghella in hot Africa, nature had been burnt dead for a year. If you hit the trunks of the trees with the butt of a rifle, you heard the echo of hollow wood. It was a knock on a coffin.

One night it rained, really rained, for the first time in a year. The warm water came down in big heavy drops from one o'clock until four. There was no wind and the rain dropped with the sound of a waterfall. The tent was flooded. The rubber mattresses floated and everything was soaked. We sat in the dark in a couple of inches of water and listened

to that rain. Then it stopped. The water slowly drained away and we went back to bed.

I was the first to get up. It was nine o'clock. The air was clean. It was a new air and it was almost cool. Then I realized for the first time that for all these months we had been breathing an air with a smell, a bad smell perhaps. I went out of the tent and beyond the still-dripping mangroves. There was not a cloud in the sky. I put my hands over my eyes. What I saw could not possibly be true. It was magic or witchcraft. That burnt grey island had turned to emerald.

Spring had burst upon us in three hours. The island was covered with short, brilliant green grass. It was growing on the madreporite fossils, inside the rocks, under stones, on the sand, on the roots of the trees. Leaves sprouted from the dry branches of the grey and white trees. The sun was blazing, the colours were dazzling and the air had lost the liquefying heat haze.

I walked about, enjoying the sight of my footprints on the grass. I sat on a lawn that had been sand the day before. Two red and brown birds that I had never seen before flew up. There were birds everywhere. I called Cecco, Giorgio and Priscilla. 'Priscilla, come and see! There's grass like there is in England!' And the island was booming with wings. We had a good look round and met two storks, five or six red-billed tropic birds, a flight of brown boobies (those that look like large wild duck), five quails, terns, a pelican, eight turtle doves resting on a branch, three herons and in addition to the permanent residents—the ospreys and the marsh harriers—there were hundreds of little birds, smaller than our sparrows, grey, red, brown and yellow. The quails were on the grass and the stubble of the interior. The ospreys and the marsh harriers circled in the sun. The little birds buzzed around the thorn bushes, and all the others, the

pelicans, storks, boobies, terns and tropic birds were on the beach resting after their long trip.

Spring had arrived on land and perhaps in the sea too.

We did not yet know it, but something was happening in that great calm sea.

*

Cecco went down to the sea and stood in the water. Then he went to the boat and pushed it on to the water. I followed him, filled the tank and sat at the tiller while he got the harpoon. He called to Tesfankièl:

'Coming? It's calm to-day. You won't be sick.'

'Where are you going?'

'Don't know. Around the island. Coming, yes or no?'

'Yes.'

Cecco jumped into the bows and gave the away.

'Where do you want to go?' I asked.

'Further out.'

'Why?'

'Because this green water irritates me.'

'Shark water, eh?'

He smiled. It could be.

It was 5 p.m. and there was a March sunset in the sky. Against this background of the changing colours of the sea and sky we had already noticed five mantas leaping out of the sea. In the past days we had noticed little mantas shooting out of the sea at several points. They did three or four head-over-heels, up to twelve feet into the air, and then fell back flat into the water with a plop.

Toomai of the elephants saw a night dance of monsters 'in the heart of the hills of the Garo'. We were now going to see another dance in the abysses of Dur Ghella.

The first big manta we saw was on its own. Tesfankièl

noticed it behind my back. We turned just in time to see it float up and turn over backwards, a white belly against the violet of the sea. It disappeared in the darkness with a slow, solemn turn. This was the first time we had seen a manta behaving like that.

A hundred yards further on another manta crossed the bows. It floated up in the same way from the bottom and then, just below the surface, it turned over on its back and disappeared noiselessly. Cecco looked at me.

‘What the devil are they doing?’

‘Let’s go on,’ I replied.

I looked to the west. The sky was lined with long, thin clouds and each one was ablaze with the light of the setting sun.

It was six o’clock and we were travelling very slowly with the throttle almost closed. We were approaching the northern point of the island although well offshore over a depth of 150 feet. Then two mantas appeared, one in front and one behind us. They carried out the usual acrobatics. Then they began erupting everywhere, mantas of six or seven hundred-weight measuring twelve feet across. They opened out their wings in an incomprehensible invocation and turned slowly over, around the boat. To the west we saw with excitement the centre of the great dance. The sea was in turmoil.

‘Go straight on,’ Cecco said and I steered, hypnotized, to the centre of the vortex. And while the sun slowly sank and lit up the sea with a violent orange light, we reached the centre.

Forty and more mantas came up vertically from the depths with their wings and their horns stretched, opened the sea and twisted over backwards diving down again into the depths. The dives of death went on without interruption, white bellies against an orange sea, black spectres in the

deep. The ship was rolling. Tesfankièl's skin had gone grey while he looked to left and right at the monsters. Some of them went under us. Others threatened to turn over on to us. When one appeared like this right in front of the boat we could measure it in relation to the boat. The boat was eleven feet long and some of the mantas were twelve to fifteen feet across and just as long, weighing perhaps up to a ton. One cathedral that heaved out of the ocean was approaching eighteen feet. It turned over five yards away. The great wave in its wake plunged towards us. It flung itself with a thud against the bows. Cecco was knocked flat. The boat was swamped, and I was drenched. Cecco got on to his feet again, opened out his arms and yelled: 'Great God!'

The sun went green and vanished. The sea turned to purple and became transparent. We could see the mantas twisting down below. The dance went on for half an hour. Why? After another ten minutes the wake of some new creature passed us. Then another approached from about fifty yards away. They were little mantas two feet long, travelling in pairs. They flapped their little wings furiously and made for the open sea. New pairs of little mantas passed us by and the mothers continued twisting over. I shouted to Cecco:

'These are the new-born! It's the parturition of the mantas.'

Cecco did not answer. No one in the world has seen the mantas giving birth and it is still not known how many offspring they produce at a time. The books say one. But I saw one of those enormous beasts come out of the water three yards from me and two little tails were projecting from the cloaca. Then I saw others with two tails showing at the cloaca, always two—not three and not just one!

The detachment of little mantas, always in pairs, crossed us five or six times. They travelled straight to the west, towards the last glimmers of light and then were lost in the darkness.

I dried my face and turned to Cecco. 'It's the parturition of the mantas. They were turning over in circles to help themselves. Then the young ones collect and set off together. Look! Only half of them are still here. The rest have had their offspring and are away. It seems that they abandon them straight away. I wonder where they are all off to.'

Cecco looked out from the bows. The sea was black and the bellies of the mantas that were still turning over were unexpected ghosts in the gloom.

Gradually the waters calmed and the dance ended. The sky was now clear and the first stars had come out.

Cecco sat down on the bottom of the boat and looked for a cigarette. He found the packet but it was soaked. I had not got any.

'Cigarettes, Tesfankièl?'

Tesfankièl had a look through his pockets and shook his head. 'Kalàs.'

'I was thinking about . . .'

'Toomai of the elephants,' I said.

Cecco smiled and nodded.

'It's a pity Gigi wasn't here,' I said.

'At least, he'd have had a cigarette.'

'We'll have to tell him about it.'

A flight of birds flew over us in the darkness. They were flying strongly towards the west. I started the motor, turned the boat to the east and we made for home.

APPENDIX

Introduction

GIANNI ROGHI has entrusted me with the editing of the scientific section of this book. In view of the enormous quantity and variety of fauna in the Red Sea, the mass of specimen material brought back and the short time that elapsed between the return of the Expedition to Italy and the writing of this book the task is not an easy one. Several difficulties beset the biological investigation of the causes determining the habits and ways of life of the various groups of animals that we studied in the Red Sea. The classification of many of the fish, echinoderms, crustacea, molluscs, etc., that were captured, is still problematic and an exact classification will take months or years. I shall therefore confine myself to summary observations of a strictly scientific nature and develop certain points already mentioned by Roghi and of interest to the general reader. These notes are not an exhaustive record of what was observed and collected. The relevant studies will in due course be published in a series of monographs compiled with the collaboration of Italian and foreign naturalists.

FRANCESCO BASCHIERI

THE RED SEA AND THE ARCHIPELAGO OF DAHLAK

There is a number of theories as to the geological origin of the Red Sea; I will briefly quote two of them.

The first theory is that the Red Sea has its origin in enormous faults in the Eocene strata and the flooding of these depressions with water from the north, that is, from the Tethys Sea. Following a later interruption of the link with the Tethys Sea, the Red Sea was subject, in the Miocene period, to intensive evaporation. Besides destroying all forms of life, because of the high increase in the salinity of the sea, this process of evaporation left great deposits of saline rock which can still be found on certain stretches of the coasts. Towards the end of the Pliocene period the Red Sea became connected with the Indian Ocean and forms of life passed from one sea to the other.

The second theory, by Sewel, maintains that after a drop in marine levels caused by the expansion of the glaciers of the Pleistocene period, the communication between the Red Sea and the Indian Ocean may have been interrupted by the appearance of a bar between the two seas. Since the Red Sea was already separated from the Tethys Sea it was transformed into a salt lake and practically all forms of life vanished. With the recession of the glaciers in the second phase of the Ice Age and the raising of the sea level, communication between the two seas was re-established. Fauna then passed into the Red Sea. (After the cutting of the Suez Canal in 1869, it was ascertained that some forms of life

had passed from the Mediterranean into the Red Sea and vice versa.)

The length of the Red Sea from Suez to the Straits of Bab el Mandeb is 1,386 miles and its maximum width at the level of Massawa is 207 miles. Its average depth is estimated at 1,600 feet and the maximum at 7,780 feet at about the centre of the sea near the 21st parallel, a little north of Port Sudan. The bar that rises just inside the Straits of Bab el Mandeb lies at an average depth of under 1,000 feet.

Between May and October the temperature of the air is never below 86° F and the humidity of the atmosphere is sometimes more than 80%. Because of this high temperature and heavy evaporation, constantly flowing rivers do not exist and the salinity of the sea is more than 40 per 1,000. The African and Arabian coasts are rocky in parts, but they are generally defined by sand- and coral-banks protected by reefs that follow the coastline.

There are several islands of various size. These are mainly of madreporic origin and form the archipelagos of Suakin, Dahlak, Hanish and Farman, to mention the most important. Only the axial zone which is free from islands, rocks and banks offers a safe route for shipping.

The archipelago of Dahlak lies between latitudes 15° 30' N and 16° 37' N. It includes 126 islands, generally flat with highly splintered coasts, lying on a foundation of neogenic limestone, chalk and marl and containing calcareous corals of the Pleistocene period. The Dahlak islands lie opposite Massawa, but are separated by a wide channel from the port, which can be approached by shipping from either the north or the south.

The temperature of this zone is very high and rain falls so rarely that, apart from the growth of mangroves in a few coastal areas, the vegetation is limited to a few miserable

shrunken acacias, some palms and vast desert areas which go green with sprouting grasses and plants immediately after the rain and then dry up just as rapidly.

The fauna of the islands is mainly birds. Not counting mice, which are common even on the small islands, the only important mammals are the gazelles of the species *Gazella isabella-isabella* living on Dahlak Kebir.

FORMER EXPEDITIONS

In some respects the Red Sea is like other tropical seas, but many of its physical and biological characteristics distinguish it sharply from any other sea in the world. Because of this and because of its geographical position it became, shortly after the building of the Suez Canal, the object of study and research by expeditions from a number of European countries.

Among the first hydrological and physico-biological research expeditions were those of the Royal Ship *Scilla* of the Italian Navy, which operated in the region of the Channel of Massawa and the Dahlak Islands from 1891 to 1895, when its work was interrupted by the first Ethiopian war. Immediately after this, from 1895 to 1897, the Austrian ship *Pola* conducted exploration of great thalassographic importance. In 1903 the Italian Navy carried out thalassographic and biological research with the RS *Staffetta*. From 1923 to 1925 the Italian Navy, working with the ship *Ammiraglio Magnaghi*, collected important thalassographic data and returned to Italy with a great quantity of material for study. More recently, the English ship *Mahabis* conducted a series of investigations chiefly of a hydrological nature. From 1948 to 1949 the English yacht *Manihine* carried out an exclusively biological exploration in the zone of the Gulf of Akaba, and from 1950 to 1951 repeated the exploration along the Sudanese coast. At about the same time Commander Y. Cousteau in his ship *Calyпсо*, fitted out with the most modern thalassographic equipment, carried out some important investigations along the coast of Saudi Arabia.

Yet in spite of all the activity of scientists and expeditions in this sea, little or nothing of a conclusive nature has been achieved, especially concerning the biology of the sea. It is significant that the standard text-book on the ichthyological fauna is still Klunziger's, dating from 1870-1871.

OUR METHODS OF COLLECTION AND OBSERVATION

The difficulty or downright impossibility of collecting marine organisms, especially fish, in a zone rich in coral formations with the conventional indirect methods of the trawl-net, fixed-net, bow-net, hook, etc., obliged us to collect directly, swimming underwater in apnoea (free-air immersion) or using the oxygen apparatus—by far the best method. Echinoderms, crustaceans and in general all benthotic organisms that were fixed or moved very little, were collected by hand, occasionally gloved for protection against organisms that stung, like millepors, anemones, etc. Moving animals were captured by other means, the most important of these being the underwater gun. Using this weapon we were able to catch sharks and other fish which even the native fishermen said could not possibly otherwise be caught.

The gun proved suitable for taking medium-sized and big fish, but small ones had to be caught by means of thin metal lances tied to a sling. For the minute fish of a couple of inches long we had to resort to small charges of gelatine. Unnecessary killing was avoided by limiting this to a range of from eight to ten feet.

With this system alone it was possible to collect fish which in the past have avoided capture or escaped notice and which are therefore of special interest to the scientist. In this way we collected numerous examples belonging to the most varying species of the families *Pomacentridae*, *Antidae*, residents of the various madre pore ramifications, *Labridae*, *Gobidae*, *Blennidae*, *Scorpaenidae*, *Apogonidae*, *Syngnathidae*, etc.

The direct method is not only useful for the collection of material; it makes possible accurate underwater observations, which can confirm or deny long-standing theories based not as a rule on scientific research but more often on sailors' and fishermen's tales.

PLANKTON

The term plankton indicates a group of living aquatic organisms which may be single-cell (protozoa and proto-phyta) or multiple-cell (metazoa and metaphyta), all of very small dimensions, of limited autonomy of movement and therefore subject to the movement of the water. Widely varying organisms make up plankton, from aquatic protozoa (*Foraminifera*, *Radiolaria*, etc.) to many crustaceans among the metazoa (*Copepoda*, *Ostracoda*, etc.) and *Celenterata* of all the free forms, that is, those not fixed on the bottom (these too of minute dimensions), and so on for every other biological group as well as for all stages of their early development: from the eggs of crustaceans and fish to the larval form of the first and the young of the second; including therefore those groups which later pass on to form part of benthos (*Celenterata*, *Porifera*, etc.) or necton (fish).

Plankton also comprises many forms of vegetable life which are controlled by the same rules as control the animal world. This includes free algae, single-cell or multiple-cell, of microscopic or slightly more than microscopic proportions.

Not all seas are equally rich in plankton. Contrary to what might be expected, the cold seas are extremely rich, and because of this contain great quantities of fish. The temperate seas, such as the Mediterranean, are the poorest in plankton. In certain zones and environments of the warm seas plankton may be present in great quantities. This is so in the case of the Red Sea.

ALGAE

While in general the Red Sea is comparatively poor in marine flora, where there are favourable environmental conditions the flora abounds.

Among the green algae (*Chlorophyceae*) we find the *Ulva lactuca*, known as sea lettuce (which is common in the Mediterranean and which, with its bright green tufts, does in fact look like lettuce). The *Ulva reticulata* belongs to the same genus and still under the *Chlorophyceae* it is possible to include several species of the genera *Valonica*, *Caulerpa*, *Halimeda*, etc. In the brown algae class (*Phaeophyceae*) there are numerous species of the *Sargassum* genus. Masses of these vegetable forms are commonly met on the high seas. They are torn away from the coastal shallows by the waves and their air-filled vesicles keep them afloat. These algae bear a strong resemblance to certain species of terrestrial flora in their somatic form. They have, for example, a rhizoide which is reminiscent of the root of a superior plant, a cauloide which is like the trunk or stem, and filloidi which look like leaves. When you dive into one of these 'submerged plantations' of sargassus you really have the impression of moving over or through a forest. Naturally it is a dwarf forest because the algae reach a maximum height of five feet. The species of the genus *Sargassum* most commonly met in the Red Sea are *latifolium*, *cuneifolium* and *sentifolium*. In the same group of the *Phaeophyceae* we noted the *Padina pavonia* which is common along the rocks of the Mediterranean coasts. It was generally found in the calcareous residue of dead madreporite formations on the coast.

The red algae (*Rodophyceae*) also grow in these shallows, represented by the genera *Laurencia* and *Digenea* (this latter genus is more commonly represented by the species *Digenea simplex*).

Among the single-celled algae is the *Trichodesium erythraeum*, which in certain zones and at particular seasons covers wide areas of the surface with an orange-red veil. The sea has taken its name from this phenomenon. We came across it ourselves on two occasions: the first time in the channels and interior of the Ghubbet Mus Nefit of Dahlak Kebir, in February, and the second time over a greater area, near the island of Sciumma at the tip of the Dankal peninsula of Buri, in April. The algae were spread over the surface of the sea and in some places were heaped up by the currents to a depth of inches, in appearance opaque and gelatinous. The water underneath was a normal colour and clear.

CELENTERATA

Madreporic Formations

The madreporic formations which run the entire length of the Red Sea coasts in various states of abundance, surround the islands of volcanic origin with barriers or breakers, or constitute the islands themselves, as in the case of the Dahlaks. They are true masses of prevalently colonial madreporaria zoantharia (they are rarely isolated), belonging to numerous species and forming strange original shapes of soft delicate colours. They have a heavy external calcareous structure on which the polyps of the colony sprout from their own cups.

Of the free forms, that is, those simply resting on the sea bottom, are the fungias (mushroom coral) of the typical roundish shape (ciclolites, patella, etc.) or of the longish, shoe shape, the Ehrenbergi. They exist among the bushy or tree-like formations of the acropora, pocillopora and madrepora of the most varied species, of a yellow, pink or violet colour.

Great quantities of galazaea with their clusters of little tubes, cover vast areas in the channels between the islands, or in other sheltered zones, in depths up to three feet or little more. These are interspersed with the mussae. In the open spaces on the sand, the so-called cerebral-form madrepora are found—montipora, meandrina, prionastraea, porites, etc.

Still in the heart of the madreporic formations, belonging

however to the class hidrogoo (the same class to which jelly-fish belong), but with a calcareous skeleton similar to the madrepores, it is easy to recognize the yellow-ochre colour of the millepores or fire-coral. They are to be avoided because of the stinging power of their polyps. At the slightest contact they shoot out a long spiral filament which acts like a minute injection needle. The poison transmitted has a paralysing caustic action. The effects on men are similar to those produced by the poison of big tropical jelly-fish. The millepores flourish most of all in clear water. Their colonies build ramifications to a height of six feet in shallow water and make swimming, even on the surface, a difficult operation.

ALCYONARIA

Alcyonaria are nearly all colonial organisms and are found in skeleton formations more or less mineralized: completely rigid (*Corallium*, *Tubipora*), semi-rigid (*Gorgonia*) and fleshy (*Alcyonum*, *Pennatula*, etc.) This last group bears a strong resemblance to the vegetable kingdom both in form and colour, especially the order of the *Alcyonacea*. These are very common in depths of three feet, alongside the rocks of the islands, and in the shade of the shelf eaten away by the sea. Their wonderful ramifications, varying from delicate pink to dark red in colour, wave gently in the breeze of the current. Gorgonians are found in the same environment, while tubipors live in deeper waters. Tubipors are often found thrown up on to the beach by the sea. These are the *Tubipora musica*, red calcareous masses shorn of their dead and decomposed polyps.

ACTINARIA

The beauty and the variety of the species of this group entitle them to be called the flowers of the sea. Isolated colonies carpet the sea-floor and the madreporic rocks of the coasts and islands of the Red Sea in great number. They exist in a wide range of colours from pale carnation to vivid scarlet. Associations between actinarians and some kinds of fish are not infrequent. Although fish are normally the diet for these anemones, small fish of the genus *Anphiprion* (chromides order) sometimes seek refuge among the tentacles of the gastric cavity of the bigger varieties and remain there immune from the stinging properties of their host.

PLATE 41. (opposite) Gigi Stuart and Sehil. Gigi shot this pelican in its right wing with his spear-gun, but did it so adeptly that it remained quite unharmed. He had approached from underneath, to the utter astonishment of the unsuspecting bird, idling on the surface. Here he holds it gently by one leg.



ANELLIDA

Anellida policheta

Spirographs are just 'sea worms', strange worms living inside a tube made from a chitinous secretion or an agglomeration of sand and small shells held together by a glutinous substance secreted by the animal itself. They resemble the common worm in their anatomy only. More exactly they should be called anellida.

A 'tassel' of beautiful colours, consisting of a group of filaments with the mouth in the middle, flows from the end of the tube. The filaments are the breathing apparatus, the gills of the 'worm'. This is a remarkable apparatus, since in certain forms it seems to be equipped with visual powers. Thus the animal can withdraw its precious instrument at every sign of danger. This presupposes that the spirograph has several enemies. It is, however, enough for a little fish to snap off the tassel, as if he were taking a mouthful of spaghetti, to cause death by suffocation.

MOLLUSCA

Cephalopoda

Cephalopods are comparatively rare in the Red Sea. The legendary giant octopus does not exist at all, and in the space of five months we caught only three small specimens, the biggest of these weighing about four pounds. Cuttlefish are more common, but still rare. We observed no squids apart from some specimens that were caught in the port of Massawa with a forked harpoon and a light during the night. However, it is probable that this species frequents greater depths, and that that is why neither we nor the natives, who have not the suitable tackle, ever met them.

AMPHINEURA

Two orders are described in this class: *Placoflora* and *Aplacoflora*. One family of the first order is known, the *Chitonids*, and two in the second, the *Chetodermids* and the *Neomenids*.

Numerous colonies of chitons are found on all the tide-washed stretches of the calcareous rocks of madreporic origin or on the volcanic rocks of some islands. Chitons are covered with a calcareous-chitinous dorsal armour of six to eight articulated plates, allowing the animal, if detached from the rock which it clings to with its fan-shaped foot, to roll up into a defensive ball like the mammal, the armadillo or some isopod crustaceans, like the wood-louse, etc.

GASTEROPODA AND LAMELLIBRANCHIA

The Red Sea, like every other tropical sea, is an ideal field of research for the malacologist. There is an extraordinary quantity and variety of empty and inhabited shells on the beaches and in the sea, in the sand and between the madreporic formations. The high-water mark on the beaches is bordered by a continuous line of shells of the two groups, *gasteropods* (univalves like cowries) and *lamellibranchia* (bivalves like oysters) intermixed with fragments of coral and madreporic. In the zones most carefully searched by us, for example on the coasts of the Dahlaks, of the gasteropod family we collected countless nerites, all delicately coloured. They are even more common, in different species, further north on the Egyptian coasts and on the island of Shadwan. Nerites, together with the white moon shells, are in fact by far the most common shells on the Red Sea littoral and because of their smooth round shape, they are the favourite 'house' of the hermit-crab. We shall refer to this again in the section devoted to crustaceans. The family of the conch shells is well represented on these beaches. Shoals of *Strombus tricornis* are easily found at low tide lying in shallow water and covered by a thin covering of algae. Other representatives of the same family belonging to the genus *Pterocera* are also encountered in the same zones. They are big shells with spiky extensions (varying in number, generally seven) adorning in a semi-circle the shiny flesh-coloured or brown lip. The biggest specimens we collected measured more than thirteen inches between the extremities of the spikes at the

apexes. The mollusc of this shell is edible. We came across heaps of these on the Sudanese coast at Mersa Halaib. After being cooked on embers or in water the animal had been extracted from a hole knocked through the upper part of the shell. I never tried this dish and cannot pass an opinion about the taste, but apparently the natives eat it greedily.

The species of the murex shells, also gasteropods, are common on the tidemark. Of these I remember the *Murex tenuispina* with its long elegant spikes going right round the shell. We collected a number of these also using the triplet on the sand bottoms. Another common murex shell is the *Chicoreus ramosus* with a bright pink peristoma or lip. In the zone of Mersa Halaib alone, we collected several harp shells. This is a glossy shell with the appearance of marble and ornamented with many falciform ribs.

The cowries and volutes are the most interesting univalve shells in the madreporic environment. They are exceptionally beautiful and are, fortunately, found everywhere. The genus *Cipraea* (cowrie, or in Italian *porcellane*, or *porcelli di mare*) of the *Cipracidae* family are collected by the natives all along the coast. They are used for decorative purposes, as vases or sacred ornaments. In some countries a certain species of the cowrie, the *Cipraea moneta*, has been widely used as currency. The biggest examples of this genus, for example the *Cipraea tigris* and the *Cipraea panterina*, which are somewhat alike, distinguished by numerous black or dark round spots on a background of one colour, varying from light or dark brown to violet, were found in low water averaging three feet in depth. The *Cipraea arabica* which is rather smaller (it averages three inches), of a bright black and white mosaic design or sometimes a pearl grey, lives in the narrow cracks of the old dead madreporic masses which form breakers to the islands and the coast in many regions. But it is also not unusual to

find them in the cavity formed by the angle of contact of the cerebral-form madre pore with the sea-floor. Other species of small cowries seek refuge in the same place: the *Cipraea turdus* and the *Cipraea erosa* measuring from an inch to an inch and a half, the minute *Cipraea hirundo* about half an inch, as well as the volutes represented by the genus *Oliva* in different species and varieties in a wide range of colours. All of these are used as beads for necklaces and are exported to Europe.

Top shells belong strictly to the madreporic environment. The natives fish the many big shell species (averaging four to five inches between apex and base) for the mother-of-pearl button industry. This is done in the same way as with pearl-bearing oysters; that is to say, there is an initial exploration with a 'bucket' such as the octopus fishers use in the Mediterranean.

Not so common, but perhaps the queen of shells, because of its fantastic variegated colouring is the *Charonia tritonis*. It is similar in shape and size to our *Triton nodiferum*, the common knobbed triton which many of our fishermen still use as fog-horns or for calling over great distances.

The bi-valve lamellibranchians are as plentiful as gastropods on the beaches. There are oysters, thorny oysters with spiky pink shells, scallops of various shades, mussels which are similar in shape and colour to those of the Mediterranean, ark shells of the genera *Arca* and *Pectunculus*, cockles, Venus clams, tellin shells, etc. We observed that these various species, while living on the same coral formation, were each limited to distinct zones in a particular habitat created by specific associations of madre pore. Some of them chose the brain-shaped madre pores as well, establishing themselves above, or more often, below—either along the cavity of the angle of contact between the madre pore and the sea-floor or

in the narrow sandy spaces between one madrepora and another.

Oysters are very common on the rocks. The pearl oyster, *Meleagrina margaritifera*, lives in depths up to sixty feet and more. The big tridacna with a green, purple, blue or red mollusc of flowering flesh, is frequent everywhere. Around this mollusc—and I am speaking of the species we met in the Red Sea—legend has built up grisly stories of pearl fishers whose hand or foot has been trapped and who have then perished by drowning. Apart from the fact that it is not so easy to get caught by the hand and still less by the foot in the valves of these furlbelowed clams (I am still considering the moderate sized species of the Red Sea), these bi-valves are not so firmly fixed as to resist an uprooting even to the point of pulling away the piece of madrepora to which they are attached. According to some sources, the pearl fishers of other seas who are caught by the foot by the *Tridacna gigae*, amputate their limb with an ordinary knife and then reappear on the surface as lively as ever. These fishermen must be supermen. Cutting off one's own leg can be no joke. And how is it done in apnoea? An optimistic estimate of the time needed for an operation of this sort using an ordinary knife cannot be less than 15–20 minutes, which is what it would take in a properly equipped operating theatre where the patient was not also the surgeon. How then could a bone be cut or a foot detached in the maximum time of five minutes, assuming that these demon fishermen could survive for so long underwater?

CRUSTACEA

Decapoda macrura

Among the *Decapoda macrura*, that is, those crustaceans with ten legs and a tail (telson), there is a lobster of the genus *Panulirus*, a wonderful green, black and white creature, which gastronomically speaking is in no way inferior in its delicate flavour to the Mediterranean craw-fish *Paluniris vulgaris*.

Besides this *Panulirus* there is a prawn, belonging to the same group of macrura, reminiscent of the Mediterranean *Homarus gammarus* or lobster, although smaller, hardly reaching three inches in length. This prawn deserves to be remembered because of its strange association with a small fish that looks like a blennius.

On various occasions, first of all on the island of Sheikh Said, then later on the shores of several islands in the Dahlak archipelago, I observed during my underwater excursions, small heaps of sand about six inches across, surmounted by a crater of less than an inch. Near these there would be a small fish about three inches long. As soon as this fish became aware of my presence it frisked into the crater, sometimes remaining there with its front part sticking out, as if waiting for further developments. I could never understand how the little fish had managed to make its den with its pectoral fins and wide tail and thought, therefore, that the sand heaps were nothing but the abandoned holes of some

other species of marine animal. One day, however, after a colleague had drawn my attention to it, I discovered the explanation at Dahlak Kebir. While I was watching these holes from the surface I saw one of the inmates slipping out of his crater, without any apparent reason, to take up position at the bottom of the sand heap, as if expecting something. Thereupon a big claw slowly emerged from the aperture, followed by a thin pair of antennae and the body of a large prawn. While the right claw was held out in front, the left one was held close into the cephalothorax and supported a quantity of sand. Not in the least intimidated by my presence or perhaps not aware of me, the prawn climbed the gentle slope of its sand-hill and discharged its load with a decisive movement of its claw when it had reached the top. The sand, which was large-grained, slid down to the base of the heap. The prawn then went slowly back into its hole and the fish darted back into its original position sticking half into and half out of the entrance. Its small lively eyes continued to stare at me as if conscious of the danger inherent in my presence. I did not move. I wanted to see if the scene would be repeated. And in fact, after a few seconds, the blennius darted back to the side of the cone followed by the prawn with another load that was discharged alongside the first one. In this way the mound grew uniformly larger on all sides.

One fact was now quite clear. The prawn was the architect and builder. But what was the function of the fish? I have thought that this might be a case of cohabitation combined with the sharing of food. Besides acting as a guard the blennius might possibly see to the victualling. Yet it remains a mystery—at least to me.

I had my observations checked by my colleagues and they repeatedly confirmed my reports.

Decapoda brachiura

While the macrura group, at least in our experience, is not readily observable in the Red Sea (because of its habit of hiding in the inner cavities of the madrepora) the brachiura or crab group is well represented and is common in coral or sandy waters. Crabs are also found on dry beaches and even in inland regions where the vegetation begins to be sparse and arid. These crustacea are the famous pyramid crabs (*Ocypoda ceratophthalma*), whose distinguishing features are long legs, a yellowish red colouring and strongly pedunculated eyes, which are elevated at any sign of danger and are swivelled like two periscopes. Like the prawns just mentioned, these crabs dig their holes in the sand, although in dry zones. They excavate with their claws, depositing the sand near the entrance hole. The sand is heaped up into cones of about a foot high. These are not found on all the beaches, however. It may be that the consistency of the sand in some areas does not allow this and the crabs dig their holes without worrying where and how the excavated material is dumped.

The ocypoda likes the company of human beings. There is, of course, an ulterior motive; where there are no mice, or very few, the crab takes their place. The mice were in fact more forebearing and were satisfied with robbing us of what they needed for the meal of the day. But the ocypoda was more presumptuous. Besides removing any provisions within the grasp of its big claws, it lifted things that were anything but edible, such as pencils, fountain pens and even the bright tube of lip-stick belonging to the young lady of the party. We did not censure him too severely for this latter theft. In the place and circumstances it was difficult to decide whether the object was of more use to him or its lawful owner.

The gelasinus resembles the ocyпода in its habit of hole-digging. It is a little red, yellow and blue crab with one of its claws more developed than the other for the defence of its threshold. Generally, the gelasinus prefers muddy beaches to sandy ones, such as the flats which are subject to the tides and the swampy terrain of the mangrove forests.

On prevalently mud-bottoms, even in a foot of water, a species of portunid is found. In form it is not unlike the small crabs, *Portunus holsatus* and *Portunus depurator* of our own waters, but it is much bigger than these. The cephalothorax is extended transversally and ends in two sharp points. It has long claws and its last pair of legs are spatuliform. It uses these for throwing up clouds of mud. When in danger, it lifts up its two claws parallel to its eyes, watches the enemy and zig-zags to one side until it has disappeared in the mud-screen.

It is edible and in populated areas is sold in clumps by fishermen in the streets.

Decapoda anomura

The anomura or hermit-crabs are numerically the most diffused group on the coasts and among the islands of the Red Sea. But they are the greediest, the most sociable, and at the same time the most cruel of the Crustacea.

The hermit-crab can in fact be classed a crustacean for only half of its length. Its front half has antennae, claws, legs and a cephalothorax, but the rear half, with its long, flaccid abdomen, has, when danger threatens, to be pushed into the empty shell of a marine gasteropod and sometimes even of a land snail, just like a mollusc. In order to protect its

abdomen from its enemies, the poor hermit-crab picks out the most suitable shell from a myriad of the most varied species, or changes with an amazing rapidity if it comes across a type which appeals more to its taste and needs. We have often witnessed such a transfer, and on the basis of repeated observations we can affirm that spiky rough shells are not the ideal of the hermit. We have often seen one leave an old bumpy lodging to move into a perfectly smooth shell such as a moon shell or a nerite. The logical explanation of this preference is that since the hermit-crab has to drag with it the not inconsiderable weight of its own house, it tries to lighten its work by choosing a shell which slides easily across the ground. When the hermit-crab is faced with a slope, for example a sand dune, it acts with great good sense. It would be heavy work to drag its shell behind it, at the same time holding it so that it did not slip away from its abdomen downhill. The hermit-crab is shrewd. It turns round and goes uphill backwards pushing its load in front of it.

I have said that the hermit-crab is the greediest of crustacea. To be convinced of this it is enough to watch colonies of them a hundred yards inland, grouped around the trees where the ospreys have their nests. When the falcon is feeding its young, pieces of fish fall down to the crabs and they have none of the worry of hunting and fighting for their food. They can feed without danger so long, that is, as each individual member of the tribe keeps his abdomen well covered up. If one of the tribe by misfortune loses his shell his mates pounce on him, tear him to shreds and devour him in a flash.

ECHINODERMA

Asteroidea

We collected numerous examples of *Linckia multiflora* along the madreporic rocks and especially in the shadow of the groove which the sea has eaten into the rock itself. It is a yellow-orange star-fish. In cross-section its arms are almost round and it has an incredible power of regeneration. Many of our specimens were comet-shaped, that is with one arm more highly developed than the other four. The four small arms had been regenerated from the larger fifth one which had been previously detached or amputated from a normal, fully-developed star-fish. Other species are found in the same environment. The big *Acanthaster planci* is, however, common in greater depths on the living madreporic formations. It has from ten to fifteen arms and long erect spikes all over its back, which are mistakenly believed to be poisonous. When this asteroid is disturbed it draws in its arms underneath and takes on the appearance of a genuine sea-urchin.

We collected specimens of *Culcita coriacea* on sandy bottoms. Comparatively common, it is yellow or bright orange in colour, like a pentagonal tile in shape, measuring eight to ten inches across.

ECHINOIDEA

The *Tripneustes gratilla* is by far the most common of this group. It is a typical tropical sea-urchin, dark or black in colour, its spines from eight to ten inches long, as frequent in coral depths as along the rocks and found even in ports on the sides of the wharves. One of the inconveniences facing those who repeatedly enter these waters is being stuck by these urchins. Such an encounter is painful because it is difficult to extract the spines from the flesh. Fortunately, the acute initial pain soon passes, and there are no further consequences. Another urchin, the *Prionocidaris baculosa* with not so many but rather bigger spikes, is common in the Dahlaks and in regions further north. The *Heterocentrotus mammillatus* has the most impressive spines of all, as big as or bigger than a normal pencil. One of the characteristics of these spines is their power of growing a new tip when one is broken. Finally, the *Olypeaster* is often found on sands. It is very flat with a thick down of stiff spines and in some species the perimeter is almost pentagonal.

HOLOTHURIOIDEA

There are numerous species in this group, but the majority belong to the genus *Holothuria* (sea cucumber). As in the Pacific and Indian Oceans, certain species of holothuria are fished for the trepang industry; that is, they are dried, stored and exported to the Far East where they are consumed in large quantities.

OPHIUROIDEA AND CRINOIDEA

There are numerous species of ofiurs and crinoids in the Red Sea. The ofiurs, which are like serpentine star-fish or charming hairy spiders, are most frequently found in the cavities of the coral. The best way of collecting them is to lift any block of coral from the sea-floor, take this on to dry land, split it with a hammer and then lift them out from the crevices.

Crinoids are often seen underwater, attached to the tops of the coral. They may be yellow, brown or reddish. They sway gently in the current like flowers with numerous tufted stems.



42A. Reading from L. to R.: Top pair: *Lutianus kasmira*, *Holocentrus asfur*; second pair: *Heniochus acuminatus*, *Chaetodon mesoleucos*; third pair: *Ostracion tuberculatum* (the tiny fish), *Holocentrus rubrum*; fourth row (group of three): *Chaetodon larvatus*, *Monacanthus melanocephalus*, *Cephalopholis miniatus*; at bottom: *Lutianus fulviflamma*.



42C. A red grouper.



42B. A Parrot fish.



42D. Reading from top to bottom—Top: *Soldier fish*; middle: *Rainbow fish*; bottom pair: *File fish*.

FISH

SELACEA SQUALOIDEA

(Sharks)

The species we most commonly met in the Red Sea were the *Carcharinus melanopterus* (black-fin shark) and the *Carcharinus albimarginatus* (white-fin shark). The biggest specimen I ever came across was almost certainly *Carcharinus limbatus* (grey shark) measuring more than nine feet long. The average length was around five feet. In addition we found the harmless nurse shark (*Ginglymostoma cirratum*).

On two occasions only did I notice among the sharks we caught female specimens of the species *Carcharinus melanopterus* in an advanced state of gestation. In the first instance it was an adult about six feet long with four offspring, each measuring a foot and a half. In the second instance the shark was about three feet long and it was carrying three offspring about ten inches long.

A lucky meeting with two specimens of *Rhineodon typus*, the whale shark, gave us the chance of observing this uncommon selacean mastodont, the biggest fish in the seas, at close quarters. The biggest of the two was more than thirty feet long. Our four metre boat cut a wretched figure beside it.

SELACEA BATOIDAEA

(*Skates and Rays*)

The batoid group is widely represented in the Red Sea by the following families: *Rhinobatidae*, *Raiidae*, *Dasyatidae*, *Myliobatidae* and *Mobulidae*.

Specimens are frequently met with both on the sandy bottom inside the coral barrier and in the shallows of the barrier itself, in the open spaces between the madreporite masses or in the shelter of some of the umbrella-shaped corals. Other species are most numerous on the beaches, following the tides during their flow inland. In these zones it is not unusual to catch some big *Rhynchobatus dyeddensis*, the guitar fish. Stuart Tovini once met a species of sawfish, another famous batoid, in the Channel of Nocra. We often discovered rays in the mangrove forests when they were flooded with water. These belonged to the species *Dasyatis sephen*. We also often met the *Aetobatus narinari* or eagle ray, and were not infrequently spectators of its love-making. In one case we saw the male trying to hold the female by biting her at the bottom of her nape, as cats do.

From the point of view of size the most impressive of the batoids in the Red Sea is the manta, represented in these waters by the *Manta Ehrenbergi* which measures up to twenty-one feet or more between the points of the pectoral fins (resembling wide billhook-shaped wings) and weighs more than a ton.

The ferocity of the manta is pure legend. On more than

one occasion we swam in the middle of entire shoals of them and never saw the least sign of aggression on their part. Mantas do not even attack when wounded. So far as we could see they are peaceable animals, all the more so since they have no means of attacking. Physically, mantas resemble the common ray-fish except for the position of their eyes, which are lateral in relation to the head and not above, and because of two appendages, shaped like two flattened horns, used for feeding purposes, at the sides of the wide mouth. They feed on plankton or small marine organisms.

Rogli has already described in his chapter 'The Dance of the Mantas' what was undoubtedly our most interesting experience of these giants of the sea, both from the scientific and spectacular points of view. In the absence of absolute proof I cannot, as a naturalist, make any statement about that phenomenon. The hypothesis of the searching of a suitable zone for a breeding-ground by the gravid mantas and the general assembly on certain days is not unreasonable, especially when one takes into consideration the strange behaviour and twistings of the mantas in question as well as the subsequent appearance of troupes of small individuals looking unquestionably like new arrivals, swimming along oddly in double rows.

If it had been possible to capture an adult specimen on that occasion, we could have solved a problem which is still veiled in mystery.

ISOSPONDYLI

(*Big Haarders* or 'Cefaloni')

Although this fish belongs to the order of the *Isospondyli* it is of a species which has not yet been determined.

It is encountered in shoals in the coastal shallows and, as we have related, often accompanies mantas and feeds on the same food as them, that is, plankton or animal and vegetable organisms of minute proportions. In our experience it may be as long as four feet and weigh about twenty pounds.

Shoals of these splendid silver fish are easily seen as they feed in the sea, ploughing the surface with their projecting upper lip and the upper wing of their thin sickle tail. We called them 'cefaloni' (big haarders) because of their likeness to that species. But while they are easily seen it is difficult to get close to them. For a long time it was impossible for us to ascertain to what fish those projecting fins belonged, since we had only to put our feet to the water to make them scatter from the scene. In time we learned that it was wiser to let them approach themselves than to go chasing them. Once shot they put up a tenacious and bitter resistance, giving evidence of unusual strength.

APOIDES

(Moray Eels)

Like many other forms of life in this sea, the morays are generally bigger than their Mediterranean counterparts. The specimens we most often met, of the species *Gymnotorax undulatus*, among the most common in the Red Sea, averaged around eighteen pounds. There are many morays smaller than this, however, belonging to other species such as the *Echidna geometrica*, lighter in colour, with distinguishing, symmetrically arranged black spots on the head. Tropical morays usually live in the cracks and fissures of the madre-pore, sticking their heads out and keeping their hind-quarters inside. They often facilitate their own capture. When they have been struck by the harpoon they writhe in a combination of agony and fury and demolish their coral homes with their powerful tails. Then, frequently, all the underwater hunter has to do is to wait patiently and draw out his prey from a heap of ruins. In a last move of self-defence the moray wraps itself round the arrow and bites it. The danger of being wounded by a moray is not to be excluded. If it leaps out of hiding and attacks its aggressor, serious trouble may follow, for the poison in its salivary glands makes its bite very painful.

SYNGNATHIDAE

(*Pipe-fish*)

The curious pipe-fish that Roghi mentions is the *Sygnathus fasciatus*, a close relative of the *Hippocampus brevirostris*, better known as the sea-horse. The distinguishing features of the family are: a small mouth at the end of a tubular face, reduced branchial apparatus, absence of spinous rays in the fins, and above all, a body and tail enclosed in an external skeleton of annular sections.

At first sight this little fish seems insensitive and lazy in his movements, and the underwater swimmer instinctively tries to catch him by just grabbing. But at the last moment, when the swimmer's fingers are about to close over the victim, he makes a graceful sidestep and leaves the hunter guessing. It is useless to try again. The pipe-fish does not run off, but he knows how to repeat his dodge.

SPHYRAENIDAE

(*Barracudas*)

The barracudas of the islands and coasts that we explored are very common, but much less dangerous than is normally supposed. Two species of the family were observed and caught by us. They were the *Sphyraena jello*, and probably (still to be confirmed by a close examination of the material brought back) the *Sphyraena picuda*. Although I have stated that barracudas are comparatively harmless (and they never touched us) this opinion is contrary to that of the natives of the coasts, and I must confess that we always felt uneasy while they were around. It is odd that when the barracudas gathered in shoals, sometimes of hundreds, they never gave us a glance. But when we crossed the path of one or two in isolation, especially in turbid waters, we had the feeling that we were being followed. We would turn round and surprise the fish a few yards from us. It was always ready to make off if we threatened it, but as soon as our backs were turned it was following again. This unpleasant state of affairs sometimes lasted for hours at a time.

It is difficult to suggest an explanation for this behaviour. Curiosity? Perhaps. Hope of picking up scraps? Possible too. Dangerous or not, the barracuda is not a likeable creature.

SERRANIDAE

(Groupers)

The grouper family is represented by several species in the Red Sea. Of these many are of roughly the same proportions as our common *Serranus cabrilla*, but others, like the *Epinephelus tauvina*, can weigh more than a hundredweight and measure more than six feet. The habitat of many species of this family is confined to the madreporic-coral bands surrounding the islands and running the length of the Red Sea coasts. Their habits are almost the same as those of the same group in the Mediterranean.

The small species are found in great numbers between the madreporic masses in shallow water (e.g. *Cephalopolis hemisticus* and the *Epinephelus areolatus*), while in deeper water, for example at the edge of the barrier or in the fractures of its vertical wall, bigger specimens and species are found.

Both the groupers of the Red Sea and those of the Mediterranean are inclined to 'go to ground' when hunted. The small ones hide themselves in the myriad cracks in the coral while bigger ones go for the grottoes that are to be found in the barrier. But while the caverns in the granite or calcareous rocks of the Mediterranean are a safe refuge for any animal shot with the arrow of an underwater gun, in the Red Sea, the coral 'bunker' is easily demolished with the aid of an ordinary hammer, and for the grouper the game is up.

LUTIANIDAE

(*Snappers*)

There are several small-sized species in this family (*Lutyanus fulviflamma*, *Lutyanus kasmira*, etc.) distinguished by a brown patch on the rear part of the back and a longitudinal line of a gorgeous blue; and others, not more than fourteen inches in length, which make the net fisherman happy because they are so easily caught. There are still other species reaching a length of three feet and weighing up to thirty pounds. Among these last there are the *Lutyanus argentimaculatus* and the *Lutyanus gibbus*.

I advise underwater hunters not to chase snappers. It is better to pretend not to see them. Then the fish itself will dart up to the harpoon. It is a split-second opportunity and it is too bad if it is not exploited, for the fish's curiosity is thereupon satisfied and it will go off never to return.

The Yemenites are past-masters at the art of hooking snappers. They like them because of the quantity it is possible to catch and also because their meat is in no way inferior to that of the bream.

POMADASYDAE (*Grunters*)

SCOLOPSIDEA (*Gaterin fish*)

PLECTORHYNCHIDAE (*Greyskins*)

LETHRINIDAE (*Scavengers*)

The terms 'greyskins' and 'gaterin fish' are used to describe all the fish of the *Pomasydae*, *Scolopsidae*, *Plectorhynchidae* and *Lethrinidae* families which are similar in shape and habits to their cousins the *Scyenidae*, found in the Mediterranean. Among the common smaller species of up to a foot in length there are the *Gaterin gaterinus* and the *Plectorhincus pictus*, diagram fish with a splendid pattern on a golden yellow ground. These are not infrequently met in shoals so dense that the sea floor cannot be seen. They are faithful tenants of the holes and cracks in the madrepora, where they live in an exaggerated state of overcrowding.

The much bigger *Plectorhincus shotaf* is not so common as the aforementioned, but it is by no means rare. It may measure up to twenty-eight inches in length and weigh around thirty-five pounds. It can be captured without too much difficulty with an underwater gun, except for the more powerful specimens which have to be tackled with a suitable harpoon and line equipment.

SPARIDAE

(*Bream*)

The bream of the Red Sea resemble the Mediterranean sargus in shape and habits. We came across the *Sparus bifasciatus* most frequently in northern zones, and with two dark bands around the snout and nape it is quite like the proper *Sargus vulgaris*, except for its size (sometimes it weighs over four pounds). The *Manotaxis grandoculis* with exaggeratedly big eyes, as its name suggests, is less common than the sparus. It is often encountered in almost still, small shoals in mid-water in the inlets of the barrier. It is not difficult to catch.

There are numerous representatives of the lithognathus genus in the shallows of the channels of the Dahlaks. It is difficult to take aim at these streamlined pouting fish because they are constantly in a state of quick movement.

CHAETODONTIDAE (*Butterfly fish*)

ACANTHURIDAE (*Surgeon fish*)

One of the most interesting of the numerous species of 'coral fish' found in the madreporic waters of the Red Sea and tropics is the group of the chaetodonts (butterfly fish). The mild or even high temperature of the water which allows the florid development of many species of madrepora and coral is a *conditio sine qua non* for the existence of these fantastic highly-coloured fish. The fish of the genus *Chaetodon* of the Chaetodontidae family are usually flat in a lateral direction and never very big. Their fins are so extended that the dorsal, caudal and anal fins appear to be all of a piece. Sometimes the dorsal and anal fins of this genus end in a thread-like appendage. Their colouring varies from species to species in an infinite range, from red to bright yellow, from green to pure indigo, spread all over the body in straight or wavy lines, in big or small round patches, and in horizontal or vertical bands on the snout, like a mask. They have been appropriately called butterfly fish because of this colouring and because of their habit of fluttering around, generally in pairs, near the varicoloured masses of madrepora. I confess that the duty of capturing these gorgeous creatures did not come easily to me.

Surgeon fish are common in the same environment and equally wonderful in shape and colour. They are distinguished by one or more sharp cutting spikes fixed on the caudal peduncle facing towards the head. I do not know the

reasons for this arrangement, but as flight is the surgeon fish's only means of self-protection, the spikes and peduncular blades may represent a warning to and a weapon against the hunter.

SCOMBRIDAE

(*Tunny and Mackerel*)

Scombrids are deep-water fish and rarely come in-shore. We met large shoals on two occasions only. On the first occasion Roghi met one in the Ghubbet Mus Nefit in about sixty feet of water, and on the second occasion a shoal spontaneously approached the neighbourhood of Dur Ghella immediately following a gelatine explosion. Some small mackerel, similar to the common mackerel (*Scomber scomber*) although of a somewhat lighter colour were killed at that time. (The specimens captured are still being studied and have yet to be identified). Immediately after the explosion a dense shoal of bigger scombrids came up from the deep and jumped avidly upon their poor little cousins, so that we had to act swiftly to make our captures. They were so blinded by their own greed that two of them fell victim to us.

While direct encounters with the members of this family were rare, we frequently saw them either in the port of Massawa or on the high seas.

CARANGIDAE

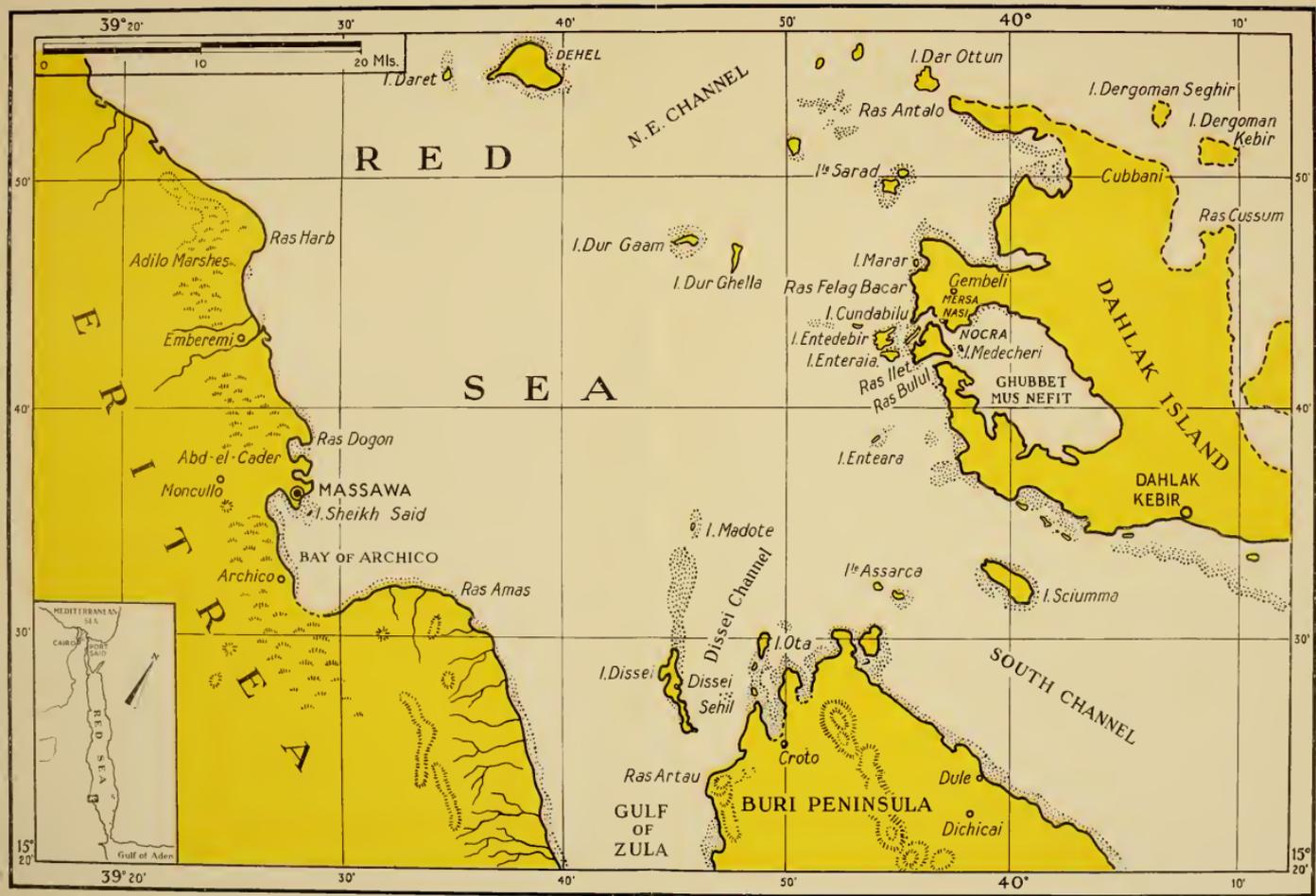
(*Kingfish*)

The most common of the carangids in the coastal waters of Eritrea and the islands is the *Trachinotus blocchii*, locally called 'sauro' (pampano). This fish vaguely resembles the yellow-tail (*Lichia glauca*) except that its snout is rounder and its body is higher. It is as strong as the yellow-tail but more inquisitive, so much so that it does not even dash off when faced with a man underwater. It is in consequence an easy prey. It is often seen in groups of five or six with the *Caranx speciosus*, another smaller kingfish equally, if not more, inquisitive. The pampano rarely enters the depths beyond the barrier. It prefers cruising along the external edge keeping to a depth of ten or twelve feet. When it is hit with a harpoon it puts up a greater resistance than its size would lead one to expect. We seldom met specimens of more than eighteen or twenty pounds.

During our explorations in the northern parts of the Red Sea, along the Sudanese and Egyptian coasts, I noted that the *Caranx sexfasciatus*, a near but bigger relative of the pampano, was common.

A very common fish in all seas, usually in the train of bigger fish especially sharks—once mistakenly called their 'pilot'—is the *Naucrates ductor* or pilot fish. Nowadays its habit of following sharks is attributed to the motive of 'picking up the scraps', but the explanation is still in doubt.

I myself observed (see also Roghi's narrative) that this kingfish hangs around men and inanimate objects like floating trunks and boats in the same way as it follows big fish. When we drew up to the whale shark, to quote an important example, many of the pilot fish that were swimming around its flanks and under its belly, abandoned it and made for the keel of our boat, as if mistaking it for the abdomen of some other inhabitant of the seas.





POMACENTRIDAE

(*Coral Fishes*)

In contrast with the Mediterranean, where this family is represented by only one species, *Chromis chromis*, the pomacentrids in the Red Sea exist in numerous species and even different genera. While these fish are rather alike in shape, they often differ in size, colour and sometimes in habits. Anhiprion for example, resplendent with vertical blue stripes over a deep yellow-orange ground, are about four inches long. Immune to all stinging processes, they are often to be found between the tentacles of big actinians of the genus *Crambactis* where they may seek refuge in case of danger. The dascyllus is compressed laterally and almost round, like a dull medallion, sometimes striped with vertical dark lines. It varies in length from half an inch to four inches. The giants of the family are the glyphidodons, about eight inches long and of a variable sky-blue colour. The pomacentrus, which is uniformly green, blue or white with vertical smoke-black stripes, is the classical inhabitant of all madreopore formations.

We saw swarms of the last group on several occasions, in all the coralline waters from Suez to Thio in Dankalia. They gathered in clouds around certain species of madreopore. These two-inch fish circled round the blocks for no apparent reason, yet never left it. I thought they were probably after food, but one day when I involuntarily lifted my hand towards one of these blocks, the fish disappeared inside so

quickly that I could hardly follow them with my eyes; not one of them could be distinguished from the coral; it was just as if each one had his own particular camouflage for a certain branch of the block. When I took my hand away again they came out of hiding, so it would seem that the association between the two was not for food but for defence, a view which was confirmed by practical demonstration some days later. One of my colleagues was hauling up a large block of madrepora from the sea-floor when an imprudent pomacentrid jumped out from its branch and tried to regain the bottom in search of a more secure stronghold. Vain hope. In spite of flappings and twistings he had hardly got more than two yards away (the speed of these fish is very limited) when he was torn to pieces by a smaller grouper and some other plunderers faster than he. The other pomacentrids that stayed behind in the ramifications of the madrepora had no better a fate; they died of asphyxia as the sun dried the block into brilliant iridescence at the bottom of the boat. The atavistic instinct of these fish does not survive the removal of their stronghold from its aquatic environment.

Wishing to confirm the hypothesis that big jaws constituted their main peril, I found a large tenanted madrepora, shook it violently to drive out the fish, and left these free to reach the coral floor. A crowd of small grouper and bream immediately pounced on them and only three of them, by grace of the sacrifice of their fellows, succeeded in reaching the safety of new crevices. Poor little fish, life is impossible for them without their coral hiding-place.

SCARIDAE

(*Parrot fish*)

On a first visit to the Red Sea one cannot but be impressed by the enormous quantity of these fish, commonly called parrot-fish because of the fantastic variety of their colouring and the shape of the mouth, which is not unlike a parrot's beak.

Some species of the family are no more than a few ounces in weight and a few inches long, but others may weigh up to forty pounds and measure a yard. Scarids live where the coral formation is most highly developed because their diet is based on the polyps of the madreporic colonies. They are sociable and live either with members of their own family or in company with other groups, such as labrids and chaetodonts. They are highly regarded as food by the natives of the coasts and islands, but for all our victualling problems, which were sometimes acute, we never resorted to cooking a scarid. They reminded us of labrids, which are handsome but unappetizing.

The most interesting of the scarids in shape, size and habits is the one that we called the rhinoceros fish. This animal has been amply documented by Roghi and can be seen in a photograph in the text. It has been classified as *Scarus muricatus*.

It was already known in the Pacific and had been reported as seen for the first time in the Indian Ocean by Smith in August 1953. The British Museum has the skeleton of one taken in the Solomon Islands (Pacific). I am at present preparing a complete scientific monograph on the subject, which will contain the first official announcement of its presence in the Red Sea.

SCORPAENIDAE

(*Scorpion fish*)

The Scorpaenidae which we most frequently met with in the Red Sea were pterois (flying scorpions or devil-fish). They are ugly to the point of being terrifying, but their colouring, ranging from pink to red and brown, their enormous fan-shaped pectoral fins and the dorsal fin which waves like a mane along all the body, are at the same time wonderful.

From repeated observations we ascertained that members of this group remain on the sea-floor, or more especially in the cracks and cavities of the coral masses during the day. During the hours of daylight we could observe the pterois only by putting the glass of our masks on to the coral wall and looking into the darkest recesses. Like all Scorpaenidae their natural camouflage is amazing, but once they have been spotted they are easily caught, especially with an underwater gun. At the approach of dusk the pterois abandon the depths, and with a graceful flapping of their pectoral fins and a light twitch of the dorsal they rise slowly up to half depth and remain there. They are usually not alone but in the company of four or five of their kind. Then with a harmonious undulating action, all their fins opened like fans, they begin to describe graceful movements. We were unable to decide whether this dance was connected with a search for food or with courting. In my opinion the second hypothesis is more convincing. It is obviously easier for this fish to feed on the sea-bottom, where it is not very noticeable,

than at half-depth where the splendour of its colours mark it out from a distance.

The *Pterois volitans* is common. It is the most beautiful of the genus. I unwillingly experienced its poisonous sting, but I must admit that in this respect the devil is not as black as he is painted. Contrary to what was repeatedly told me by the natives, its sting is far from being either mortal or very harmful. After what happened to me I would classify the effect of the sting of this fish as between that of the *Trachinus dracho*, greater weever, and the *Scorpaena porcus*, the common scorpion fish. The Director of Health Services at Kosseir, on the Egyptian coast, assured me that in a healthy subject, neither the sting of the pterois nor any other fish in the Red Sea can be considered lethal.

BALISTIDAE

(*Trigger fish*)

The trigger fish is another common fish in the coral waters of the Red Sea. Among the species we encountered, the *Balistes aculeatus* and the *Balistes undulatus* were the most frequent. They are all more or less alike in shape. The first dorsal fin consists of one or two spines which, in moments of danger, are erected immediately behind the head and become locked with the shorter dorsal fin. The first fin cannot be lowered by any outside force until the second fin unlocks itself by lowering. The second dorsal fin and the anal fin, which is rather large and lies well back, are the principal means of propulsion. They work with an alternating movement. The speed of the trigger fish is, in consequence, rather limited while at the same time its actions are indescribably comic.

They live exclusively around the barriers. When intimidated they take to the cavities and erect their dorsal fins and ventral fins in such a way that it is impossible to draw them out of their hiding-place by hand. This defence habit of theirs has led to their being called 'lock-fish', to which one might add 'with a secret combination'.

OSTRACIONTIDAE

(*Box fish*)

Box fish are by far the most singular fish in the Red Sea and in the world. Their prismatic bodies, quadrangular in the genus *Ostracion* and triangular in the *Lactophrys*, are covered with scales that are strongly joined to each other in mosaic fashion. Only the fins and tail have an epidermis with flexible peduncles. This rigidity of the teguments and restriction of the action of the fins make their movements ungainly.

They are certainly original. In some species lengths may reach fourteen inches. If it were not for their laterally situated eyes, their little fins and their colouring, which is generally lighter underneath, it would be extremely difficult to know if you were looking at their ventral, dorsal or lateral facet—all three or four are quite flat. An anatomical examination of the fish does not help. Laparotomy reveals only an intestinal accumulation, a limited muscular system (the rigidity of the teguments prevents movement), and a vertebral column placed so high along the back as to be almost in contact with the inner surface of the skin. It is an incomprehensible fish without any apparent place in the economy of the universe. It is highly unlikely that any other fish prey upon it because with such a shape and those teguments it would lie heavily on the stomach of even the most famished shark.

One day a native showed me a small specimen which looked like an eighteenth-century snuff-box. He called it one of nature's jokes. What more is there to say?

TETRAODONTIDAE (*Puffer fish*)

DIODONTIDAE (*Porcupine fish*)

Tetradonts, generally called Puffers, are not represented by many species in the Red Sea. When threatened they swell up like balloons. Since it is rather unpleasant handling their thorny skin, and since their only means of defence is to swell up and raise their bristles, one sure way of catching them is to go underwater wearing suitable gloves.

The only member of the diodont family that we met was the *Diodon istrix*. This fish also swells and erects its spikes but these are not a down of prickles, as with the puffers, but a collection of daggers. It is inadvisable therefore to try to capture a porcupine fish even with gloves. A gun is more effective.

It is edible immediately after it has died, but it rapidly putrefies. It is said that in the Far East porcupine fish are sold alive in the markets to guarantee their freshness. The rapid putrefaction may be due to the fact that the gases which the animal produces under the stimulus of fear, spread throughout the body.

REPTILES

CHELONI

(*Turtles*)

The turtles of the Red Sea belong to the two species *Chelone imbricata* and *Chelone mydas*. They are common on the coasts of the islands where they lay as many as 130 eggs each under the sand of the deserted beaches. These eggs are spherical and about the size of golf balls. The shell is soft but notably elastic and resistant to breakage. Of the total number of eggs laid by a female, about a quarter are not fertilized. These have no yolk and are irregular in shape. According to the native fishermen, when the eggs open many of the small turtles fail to reach the sea before they are carried off by the birds of prey that continually hover over the beaches.

It is fascinating to watch underwater a turtle which has not been startled. Its movements are slow and harmonious in spite of its awkward appearance. Copulation takes place on the surface of the water. Although this is difficult to believe, a turtle moves very quickly in water. Fish make way for it even if they are ten yards in front.

The meat of both the *imbricata* and *mydas* is delicious, their eggs are in great demand by native fishermen and the shell of the *imbricata* is used in tortoise-shell manufacture.

BIRDS

Since most of the islands of the archipelago are of a small area, the birds that inhabit them are prevalently water fowl or marine birds. On the big islands of Nocra and Dissei we caught the Arabian bustard, *Choriotis arabs arabs*, some guinea-fowl of the genus *Numida* and many turtle-doves. Sand-grouse represented by two species, the spotted sand-grouse (*Pterocles senegallus*) and the chestnut-bellied sand-grouse (*Pterocles senegalensis senegalensis*) used to come punctually at seven o'clock in the morning to the water-holes of Dissei, flying in from the nearby peninsula of Buri in Dankalia or from the interior of the big Dahlak islands. We were thankful to these birds for enabling us to change our menu occasionally and enjoy a really appetizing meal.

On all the islands the major representative of the birds of prey was the osprey (*Pandion haliaetus haliaetus*). We often watched it in its splendid flights and dives. We collected some of its eggs for preservation and for some weeks counted a nestling among our mascots. There were other common birds of prey on the larger islands, vultures of the species Egyptian vulture (*Neophron percnopterus percnopterus*) and hooded vulture (*Necrosyrtes monachus pileatus*). Of the falconids, the Egyptian kite (*Milvus migrans aegyptus*) was very common and a nester on the mangroves of Sheikh Said and Dahlak Kebir.

The marine birds or water-fowl were represented by different families of the order of the *Ciconiiformes*, that is by tropic birds, boobies, pelicans, herons, egrets and flamingoes,

as well as by a great quantity of gulls. The flamingoes with their long legs, red wings and pink curved beaks look like bewitched umbrellas when in flight. Their flesh is excellent and equal to the best wild-fowl. Herons and ardeids in general, and worst of all pelicans, are absolutely uneatable in spite of what the natives say. They compare the cream made from the heavy midriff of the pelican to an excellent butter with a flavour of fish. It is true, then, that in this world it's all a matter of taste.

MAMMALS

(*Cetacei*)

While voyaging we were often encircled by shoals of playful dolphins (*Delphinus delphis*). The same cetaceans are met with in great numbers near the islands along the barriers.

Our meeting with another member of the group has already been described by Roghi. I am referring to the pilot whales (*Globicephala meloena*). We found ourselves *tête-à-tête* underwater with these intelligent creatures, and our reciprocal curiosity brought us face to face, more than once, at a few yards distance. We were impressed most of all by the continuous whistle or chirp which these giants emitted. This can only be interpreted as a signal warning or a means of communication between them. Naturally I do not want to give greater importance to the phenomenon than it deserves, but I would exclude the explanation that it is caused simply by a passage of air from the blowhole. I believe that it is more probably a real sound deliberately created by the animal.

Bigger cetaceans, the sperm-whales (*Physeter catoden*) may sometimes be encountered, but these usually keep to the southern area. In certain seasons of the year they follow the big shoals of fish which cross the straits of Bab el Mandeb entering the Red Sea from the Indian Ocean. We met four of these monsters at the level of the island of Curunsas, in Dankalia, in May. They were in the coastal shallows, wildly chasing legions of bonitos, tunny and mackerel which were in turn following swarms of sardines.

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