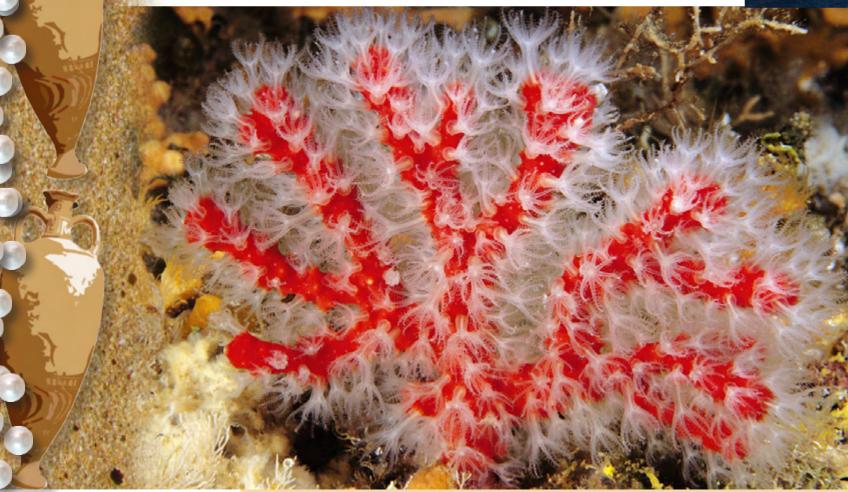
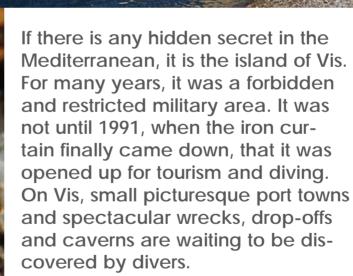


The picturesque little port town of Komiza is the home of the Manta Diving Centre



Text by Harald Apelt and Wolfgang Pölzer Photos by Wolfgang Pölzer





The drop-off

Although I have had several hundreds of dives in Croatia, I have never seen a drop-off like this before. It is not just the vertical fall into the deep blue, but the unbelievable natural growth that impressed me. Between the numerous red fan corals, I spotted what I first thought were other bright corals and bushes.

The precious red coral can be discovered even in depths that can be reached by scuba divers

From a distance, they just looked like a yellow variety of a gorgonian, but as I got closer, the real secret of this drop-off revealed itself in the beam of my lamp. The remarkable growths in front of me were black corals, a very rare species of cnidarian in the Mediterranean.

Scientists assume that these beautifully coloured polyp colonies can reach the age of 1,800 years, and as such, are one of the longest living sea creatures in the world. Inspired, I began to position my lights. These corals were not only scientifically interesting, but also a beautiful photo subject.

Some minutes later, our dive guide Lorenz signalled us onwards. He wanted to show us a grotto full of red corals. And indeed, not far from the yellow corals, a cavern entrance big enough to contain three divers, opened up a few meters into the rock. Unbelievable, but true, the ceiling of the cavern was completely covered with precious red corals. As the bubbles from our exhalations rose to the ceiling and brushed against the furry white polyps, they retracted, leaving their fire red skeletons naked and exposed. For thousands of years,

pearls of the mediterranean

Croatia

they have served as raw materials for making jewellery. These growths remind me of gnarly fingers, as they stick 10 cms out of the ceiling.

After a couple of quick shots, it was time to start our ascent. In shallow water, we had a final glide through the spacious tunnel before being picked up by Lorenz Marovic's dive boat.

Coral diver

This Croatian, who is also fluent in Enalish, has constructed his vessel from the bottom up. Marovic's boat design includes a large dive deck and a decompression chamber, which is included not only as a matter of safety, but also to support Marovic's professional as a commercial coral diver. In Croatia, Marovic is one of just a dozen who are licensed to harvest and sell genuine red coral

The biggest specimens that we saw on our last dive could possibly bring in 200 Euros, which is, however, hardly worth considering. "Real" red corals would bring in ten times as much, but you would have to

go to twice the depth to find them.

But we do not have much time to listen to Marovic's tales of his work as a commercial diver. Aniska, his wife and able helmsman, has swiftly brought the speedy dive boat back to their dive centre, which they run together.

1892 1980

Josip Broz Tito

Island history

We are on the small Croatian island of Vis. which is located on the Dalmatian coast not far from the Italian border and about 45 km off the main coast. This strategically important position has secured Vis a place in history books, not always for the better.

In the 4th century B.C., Vis became the first Greek colony in

> the Eastern Adriatic. In a short time span, the island developed into a prosperous democratic city-state and an important centre of commerce, which soon founded its own colonies. It wasn't until several centuries later, during the 7th and 8th centuries AD, that the Croatians arrived on the island, where they mixed with the existing population of Greek and Roman origin. The original name of the island, Issa, was soon "Croatiafied" to Vis.

Josip Broz Tito

Josip Broz Tito was the leader of the Socialist Federal Republic of Yugoslavia from 1945 until his death in 1980.

During World War II, Tito organized the antifascist resistance movement known as the Yugoslav Partisans. Tito was the most prominent leader of the Anti-Fascist Council of National Liberation of Yugoslavia (AVNOJ), which in 1943 established the basis for post-war organisation of the country, making

it a federation. In Jajce, Tito was named President of the National Committee of Liberation. On December 4, 1943, while most of the country was still occupied by the Axis, Tito proclaimed a provisional democratic Yugoslav government.

After Tito's communist partisans stood up to intense Axis attacks between January and June 1943, Allied leaders switched their support to the partisans. King Peter II of Yugoslavia, American President Franklin Roosevelt and British Prime Minister Winston Churchill joined Soviet dictator Joseph Stalin in officially recognizing Tito and his partisans at the Tehran Conference. This resulted in Allied aid being parachuted behind Axis lines to assist the partisans. The Balkan Air Force was formed in June 1944 to control operations that were mainly aimed at helping his forces.

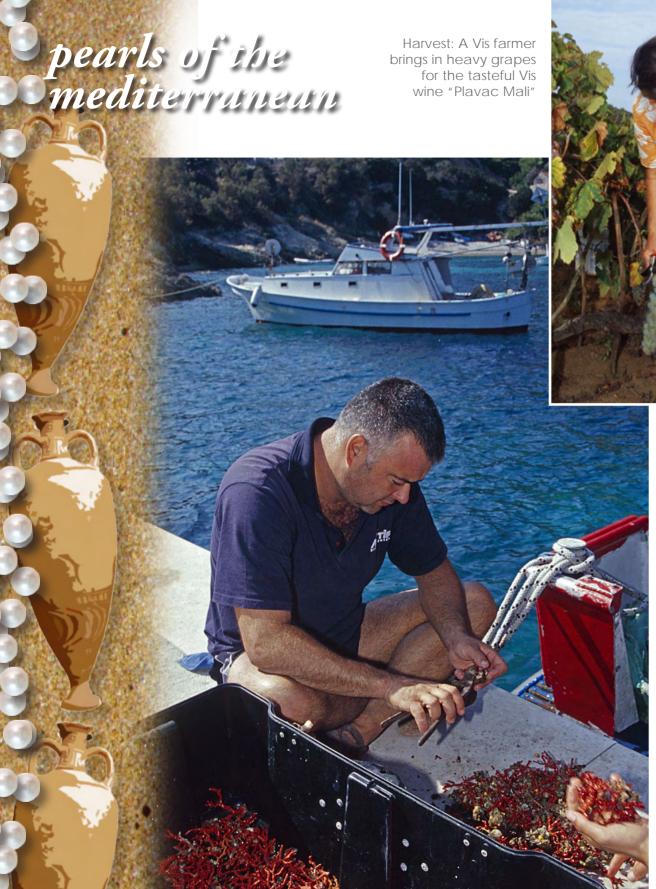
On 5 April 1945, Tito signed an agreement with the USSR allowing "temporary entry of Soviet troops into Yugoslav territory". Aided by the Red Army, the partisans won the war for liberation in 1945. At the end of the war, all external forces were ordered off Yugoslav soil after the end of hostilities in Europe. Later, he was a founding member of Cominform, but resisted Soviet influence, and became one of the founders and promoters of the Non-Aligned Movement. He died on May 4, 1980, in Ljubljana. source: WIKIPEDIA



X-RAY MAG: 23: 2008

ABOVE: One of the colourful drop-offs covered with colour changing gorgones and the rare black corals. INSET

RIGHT: "laaaahhhh": Stubborn mule, but historically, the most reliable transportation mode in the pathless hills



Tito's Bastion It was not until the Croatians arrived on the island that it became an important navy base in the Eastern Adriatic. Countless bloody bat-

tles and changes of power took place here, and later, during World War II, it regained its strategic importance. Vis became a base for Allied Air Forces and Navies, and was, at one time, also the headquarters for the staff of commander Josip Broz, more famously known as Tito, and later, as president of Yugoslavia

Its unique location as a strategic stronghold and outpost in the Adriatic unavoidably made Vis part of the war. Even 45

years after the war, most of the inhabitants were military personnel. For this reason, the island has been completely off-limits for foreign tourists. No investments in infrastructure or tourism were made on the island, since only the needs of the Army and the few inhabitants of the island were accommodated. The only factory on the island was a small textile manufacturer, which supplied the military.

It was not until the 1970's when two hotels,

orenz Marovic inspects the results of an extended dive for red corals

-Red Coral Jewelry-

rubrum and Corallium japonicum that are used. The unprocessed hard skeleton of red coral branches is naturally matte, but can be polished to a glassy beautiful

Red corals resemble small leafless bushes up to a meter tall. Their valuable skeletons are composed of intermeshed spicules of hard calcium carbonate, coloured in shades of red by carotenoid pigment.

Even if red is thought of as their typical colour, corals come in a wide range of colours from red to white and from blue and brown to black. The most popular are the red hues from pale pink, or salmon, to a deep dark red. Black corals and gold corals are very much in fashion, whilst the blue ones are extremely rare. The white of the angel skin coral, suffused with pink, is regarded as particularly precious. Other well known colours are the rich red Japanese Moro coral, the pale pink "Boke" and the red "Sardegna".

Red corals grow on rocky sea bottom with low sedimentation, typically in dark environments, either in the depths or in dark caverns or crevices and have traditionally been brought up from the depths with trawl nets. However, since first-class

> corals have now become rather rare as the shallower of these habitats largely been depleted by harvesting, divers are now deployed, in a less destructive process, which repolished.

In jewellery, it is corals such as Corallium involves divers going down and harvesting the sensitive coral branches. After that, the branches are cleaned, sorted and processed by means of saws, knives, files or drills. Coral is not usually ground or cut on a wheel.

> It is often porous, full of holes or cracked, and in these cases it is of lesser quality. Coral of that kind is sometimes filled with coloured wax to improve its appearance. High-quality coral is of an even colour and free of cracks, blotches, striations and holes. Since genuine untreated coral is rare, it does fetch good prices. For that reason, anyone being offered what appears to be high-quality coral cheaply should be sceptical. The best thing to do is to purchase one's highquality coral jewellery from a reputable merchant.

> Like the pearls, these are also organic jewellery materials. It certainly is an interesting fact that both of these are products of the water, chemically closely related with each other. Both consist of more than 90 percent calcium carbonate. And it really is a miraculous thing that nature has created both the scarlet coral and the pearl from the same, unprepossessing raw material.

> On the one hand, corals are not particularly sensitive, but with a hardness of only 3.5, they are much softer than any other gemstone material. Their beauty can easily be impaired by the wrong treatment with, for example, cosmetics, hot water or bright light. Coral jewellery should be kept in a safe place, and from time to time, cleaned with a soft, damp towel. If the surface of the coral does get scratched, the jeweller can have it

Endangered or not

Red coral has been widely sought after since ancient times to supply a prosperous jewel industry, but over-harvesting of the deep-dwelling, commercial populations of this slowgrowing, long-lived species has led to drastic reductions in the size of harvested colonies and has depressed the regeneration of the commercial banks. Red coral, however, is not an endangered species as such, due to the wide distribution of small, non-commercial colonies spread out over numerous predominantly coastal reproductive populations.



73 X-RAY MAG : 23 : 2008

EDITORIAL



A really lovely Mediterranean port town: Vis is the capital of the island of Vis

Croatia

What you see topside on Vis is also quite attractive, thanks in large part to the artesian wells under the island, which provide a plentiful supply of freshwater that makes the island one of greenest in the entire Adriatic.

Apart from the typical Mediterranean vegetation, wine also seems to favour the sandy soils of the island. From their grapes, a full-bodied redwine, the "Plavac mali" is produced. This wine will please the palate of any discerning visitor with an interest in wine. Add some grilled fish, fresh out the ocean, or a lamb chop with some potatoes and rosemary, and what more can you ask for?

The five best dive spots Blue Grotto. A very impressive cave, which is not to be confused with its more famous name sake on the island of Capri. From the little island of Bisevo in front of Vis, you either swim or dive through a narrow tunnel in shallow water. After a few meters, you will arrive in an expansive hall,

built to stimulate a bit of tourism on the island. But because only domestic Yugoslavian tourists were permitted to go, it was all just an exercise in futility. The only enterprises that really functioned were the ancient wine growing and fishing industries.

A virgin island

When the military finally evacuated island in 1991 and the longstanding travel restrictions were lifted, Vis was a virgin destination. Even to this day, more than 17 years later, the island retains its original charm.

There are only a limited number of hotel beds on the island, of which most are private bed and

FDITORIAL

season, Vis hasn't got more than 4000 inhabitants and will not turn into a tourist hell like so many other places in the region.

A majority of the few quests that visit the island are Italians, who arrive by ferry from the ports of Ancona and Pescara on the opposite coast of the Adriatic.

Divers' paradise

From a diver's point of view, we can thank the military for hiding these little secrets for so many years. Long stretches of coastline and the surrounding archipelago have hardly been dived at all. The impressive cover of marine life, as well as the many wrecks and caves that lie further north, put

Northern Adriatic to shame.

Under the huge gorgonians, you can find red corals of considerable size, even at air diving depths. It appears that the years during which the island was off-limits have protected and preserved Vis in a historic time capsule. Independent of Croatian dive regulations that were enforced in more recent years, Vis has already been using licensed dive guides for six years. Thanks to this diligence, underwater archeological artefacts, which date all the way back to ancient Greek and Roman eras, have remained largely intact

Professional diving in extended ranges: Lorenz Marovic harvesting red corals at 70 meters of depth

BOOKS





LEFT: The wreck of the Greek freight ship *Vassilios T* can be discovered in a depth between 20 meters and 55 meters. The ship was transporting coal when on the night of March 19th, 1939, it hit the rocks of "Cape Stupisce" outside of Komiza. RIGHT: A diver investigates some black coral

rywhere. In shallow water, there is another cave to tempt divers.

Seal's Cave. An extensive, yet uncomplicated, cave to dive on the island of Bisevo. It is named after the colony of monk seals that, until a few years ago, took up residence in the rear of the cave. Here, it is possible to exit onto the beach, which was once the peaceful refuge of the seals. Aside from incredible visibility, it is also possible to locate rare creatures such as orange cleaner shrimps and porcelain snails.

This trip was supported by Manta Diving Centre. ■

which stretches out before the visitor. It seems possible to enter only through this entirely submerged, but huge entrance, which is illuminated by reflected sunlight from above, which paints the ceiling of the huge vault blue. Past a ridge of rocks and some other weird formations, it is possible to reach the bottom of the cave at a depth of 20 meters. Right after that, a drop-off follows.

Teti Wreck. A partially well-preserved shipwreck in 7 to 35 meters depth that is easy to dive. The 70-meter long Italian freighter wrecked on the northern coast in 1930 after running aground due to a navigational error. The bow is completely destroyed. The wreck is erect, resting at an angled slope, with the stern covered by beautiful coral growth. The steering wheel is an excellent photo subject. Quite often, you will see conger eels on the wreck.

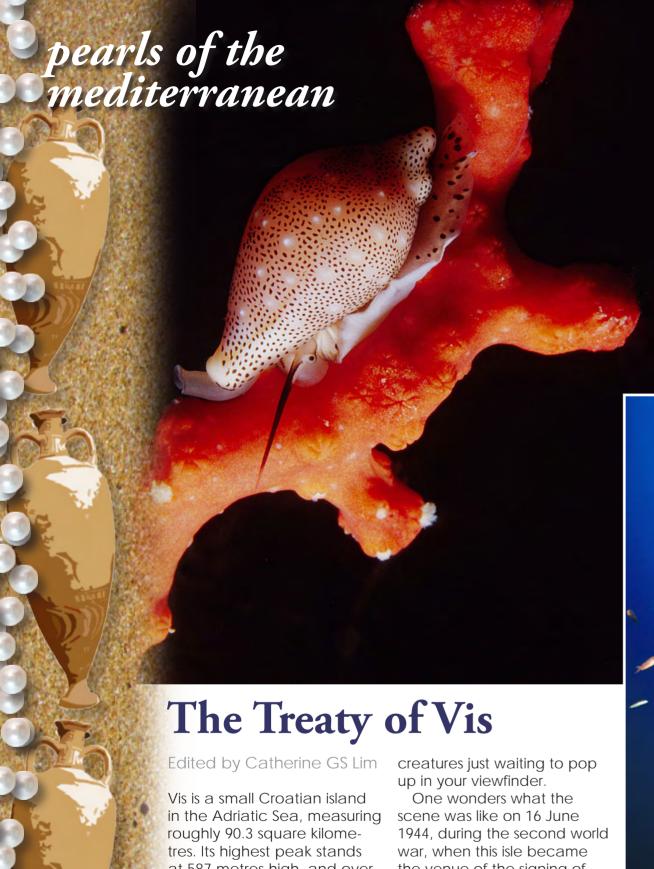
Vassilios Wreck. Resting on its port side off the northern coast of Vis, this 104-meter long Greek freighter remains in an excellent state of preservation. Laden with coal, it ran aground under mysterious circumstances on the night of March 18th, 1939. Since no one was injured, it was suspected that it was intentional, and probably a case of insurance fraud.

The bow and gigantic anchor are the shallowest and easiest part to dive. The stern, with the richly encrusted propellor and rudder, should only be visited by experienced and appropriately trained divers, since it is located at a depth of 55 meters.

Totac. A fantastic and richly overgrown drop-off that extends down to great depths. It measures up to anything that you could see in the tropics. A rocky ridge runs from the island and seems to disappear in the bottomless clear blue abyss. The region of about 30 to 40 meters of depth seems to be covered with red and yellow gorgonians and countless cup corals. There are small caves in which it is possible to see red corals. Stately langusters are eve-

NFWS





The cowrie shell looks beautiful but is—besides human beings—the most dangerous enemy of the red corals. BELOW: Drop-off walls are brightly covered with red gorgones

pation of Yugoslavia (represented by Josip Broz Tito) The treaty became known as the Tito-Šubašić Agreement.

Despite the signing, the new government that would have resulted was not formed until more than four months later, on November 2nd, with the signing of the Belgrade Agreement. This brought an interim government into the picture, effective until post-war democratic elections could take place. At least, this was what Winston Churchill had in mind when he supported the Agreement.

In reality, although Tito led a coalition government and Šubašić became its foreign minister, the real power was in the hands of the Communist-led Anti-Fascist Council of Yugoslavia.

It was only in the following year, in the autumn that the Treaty became void, following elections held by the Communists. Following a communist victory at the

polls, Šubašić and other officials stepped down in October.

On 29 November 1945, while he was still in exile and after a questionable referendum, Peter II was deposed by Yugoslavia's Communist Constituent Assembly of the "Anti-Fascist Council of National Liberation of Yugoslavia" (Antifašističko V(ii)eće Narodnog Oslobođenja Jugoslavije, or AVNOJ). On the same day, the Federal People's

Republic of Yugoslavia was established as a socialist state during the first meeting of the Communist-led Parliament in Belgrade. Josip Broz Tito was named Prime Minister.

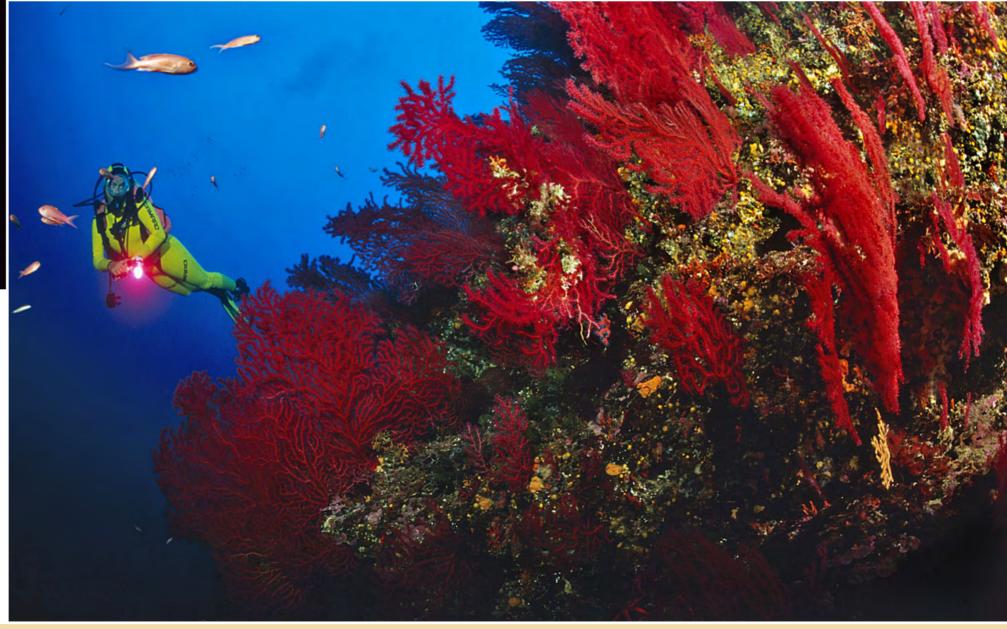
Croatia

The official Yugoslav postwar estimate of victims in Yugoslavia during World War II is 1,704,000. Subsequent data gathering in the 1980s by historians Vladimir Žerjavić (Croatian) and Bogoljub Kočović (Serb) showed that the actual number of dead was about one million.

at 587 metres high, and oversees about 5,000 citizens living in two towns and several smaller settlements.

It is your typical idyllic Mediterranean isle, complete with clear blue seas, sunken wrecks and unique marine

the venue of the signing of the Treaty of Vis. This historic agreement was an attempt at a merger between the exiled Yugoslav government (represented by Ivan Šubašić) and the Communist-led partisans who fought against the occu-









ABOVE: The island of Vis. RIGHT: Regional map with location of Vis

History Up to the close of World War I, the lands that comprise Croatia today were part of the Austro-Hungarian Empire. In 1918, a kingdom was formed by the Croats, Serbs, and Slovenes, which became known as Yugoslavia after 1929. The country became a federal independent Communist state after WWII, under the strong leadership of Marshal Tito. In 1991, Croatia Yugoslavia, but it took four more years to be realized. These years were marked by sporadic and bitter fighting between Croats and the occupying Serb armies In 1998, the UN supervised the return of the last Serb-held enclave in eastern Slovenia to Croatia. Government: presidential/parliamentary democracy. Capital: Zagreb

SOURCE: HARALD APELT CIA WORLD FACT BOOK

Geography Croatia is located in southeastern Europe. It borders the Adriatic Sea, between Bosnia and Herzegovina and Slovenia. Strategic location: Croatia controls most land routes from Western Europe to the Aegean Sea and Turkish Straits; Off the coast of Croatia lie a vast majority of the Adriatic

Sea islands, which are made up of 1,200 islands, islets, rocks and ridges. Coastline: 5,835 km combines 1,777 km of the mainland and 4,058 km of the islands. The terrain of Croatia is geographically diverse. Along the Hungarian border are flat plains; near the Adriatic coastline and islands are low mountains and highlands. Lowest point: Adriatic Sea 0 m. Highest point: Dinara 1,830 declared its independence from m. Natural hazards: destructive earthquakes.

> **Climate** Croatia has both Mediterranean and continental climate with predominately hot summers and cold winters inland and dry summers and mild winters along the coast.

> **Environmental issues** forests are being damaged by air pollution from metallurgical plants and its resulting acid rain; industrial and domestic waste is causing coastal pollution; civil strife between 1992-95 led to the need for land mine removal and reconstruction of infrastructure. Croatia is party to these agreements: Air Pollution, Air Pollution-Sulfur 94, Biodiversity, Climate Change, Desertification,

Endangered Species, Hazardous Wastes, Law of the Sea, Marine Dumping, Ozone Layer Protection, Ship Pollution, Wetlands, Whaling. Agreements signed, but not ratified: Air Pollution-Persistent Organic Pollutants, Climate Change-Kyoto Protocol

Population 4,493,312 (July 2007 estimate). Ethnic groups: Croat 89.6%, Serb 4.5%, other groups 5.9%—including Bosniak, Hungarian, Slovene, Czech, and Roma (2001 census). Religions: Roman Catholic 87.8%, Orthodox 4.4%, other Christian religions 0.4%, Muslim 1.3%, other religions 0.9%, those with no religion 5.2% (2001 census). Internet users: 1.576 million (2006)

Languages Croatian 96.1%, Serbian 1%, other and undesignated languages 2.9%—include Italian, Hungarian, Czech, Slovak, and German (2001 census)

Currency kuna (HRK). Exchange rates: 1EUR=7.2HRK, 1USD=4.6HRK, 1GBP=9HRK, 1AUD=4.26HRK, 1SGD=3.38HRK

Travel by car or plane to Split: During summertime there are

good ferry connections from Split via Hvar to Vis. The transfer takes about two hours. Price (car + 2 persons): € 35. Time tables are available at www.jadrolinija.hr Entry to Croatia with passport (valid for six months) or identity card for EG-members.

Best time to visit The climate on the island of Vis is milder than at the coastline. In summertime, temperatures are about two degrees lower, and in winter, two degrees higher than at the Croatian coast. Season starts in beginning of May and runs until the end of September.

Accommodation During the high season, it is difficult to get transfer tickets and accommodations. There are only a few small hotels on the island (three in Vis, one in Komiza). But there are some more private rooms and apartments available, which can be booked through the diving centres or at the tourist agency, Darlic & Darlic: tel. 00385-21-717 205 www.darlic-travel.hr

Diving The underwater scenery around Vis is diversified and offers all that scuba divers and experienced tech divers are looking for: colourful drop-off's, caverns, grottos and wrecks. Good visibility is one of the big advantages of this Mediterranean region. Most of the year, a 5-7 mm wetsuit is suitable; only in the beginning of the dive season is a drysuit more comfortable. There are four dive centres on

Manta Diving, Komiza www.manta-diving.com Issa Diving Centre, Komiza www.diving.hr/idc Diving Centre ANMA, Vis www.anma.hr Dodoro Diving, Vis www.dodoro-diving.com

Deco Chamber

The Manta Diving Centre has its own decompression chamber on board the dive boat. The next big decompression chamber is at Split. Transportation via speedboat or helicopter.

Boats in the harbour at Komiza



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