Wonderful sailing in the Adriatic

In 2009 we published the first Harbour Guide (Havneguiden) for our home waters, the expansive Stockholm archipelago and its 30,000 islands. This was followed in 2012 by a Harbour Guide for the Swedish inland waterways including the Göta Kanal and lakes Vänern and Vättern, and in 2014 by a Harbour Guide for the Baltic coast from Flensburg in Germany to Gdansk in Poland. Each of these sailing areas has its charm. However, the easternmost parts of the Adriatic and in particular, the beautiful Croatian archipelago have a very special place in our hearts. The area is relatively straightforward to navigate and is well marked. The climate is beautiful in the summer, with wonderful air and water temperatures and with winds that provide both easy and more challenging sailing. The infrastructure for leisure boats is well developed, providing all the services you could need. Even so, you can still find isolated and well-sheltered bays where to take in this area's unique scenery.

Wonderful people

Our experience of sailing the Adriatic has been invaluable in the preparation of this Harbour Guide. We spent countless hours and covered many nautical miles, under a wide range of conditions, in the Croatian archipelago and the other areas covered by this Guide. We met many wonderful people; hardy locals, other leisure boat skippers and crews, experienced commercial captains, fishermen and many others to whom the archipelago is important, including harbourmasters, tourist office staff, the local police and other officials. All were very helpful, patient and friendly with us and our many questions.

Big and small

Sailing the area and first hand experience of the approaches, navigational challenges, weather conditions and harbours is of course very important. However, this only makes up a small part of the work involved in preparing this Harbour Guide. The work we have carried out at our desks at home, Googling, browsing through the literature, making telephone calls, checking facts, sorting and compiling the most important information on each harbour, drawing figures and charts and writing the text, has been a major part of the preparation too. We selected no less than 470 harbours along the Slovenia - Croatia - Montenegro coast for inclusion; everything from full-service marinas in lively cities to solitary islets in the outermost parts of the archipelago, from moonscape-like terrain to leafy bays with crystal-clear turquoise water, from hustle and bustle to tranquil and quiet.

Harbour Guide contents

Each page covers one, or sometimes more than one, harbour, with an aerial photograph and a detailed chart to plan your approach. At the beginning of the book is a planning chart.

Each text is split into a General and a Berthing section. The General section describes where the harbour is located, often in relation to other harbours nearby. History, scenery and culture are described along with recommended activities. The Berthing section provides all the instructions the navigator needs, such as where and which way to berth, harbour depths and how exposed it is to winds and sea from different directions. The approach to the harbour is also described. A common format is used for each for easy reference and to compare harbours according to current weather conditions.

Symbols and waypoints

The symbols in the fact box under the main photograph demonstrate the range of services available in each harbour. Telephone numbers are given along with websites where you can read more about the area and things to do and see.

Waypoints are given for the approach we consider best for that harbour. They are marked on the chart, with coordinates in the fact box. Annotations show recommended approaches and the best places to anchor and tie up.

Harbour Guide corrections and updates

We are grateful for all feedback, corrections and suggestions for the improvement of this Harbour Guide; these should be sent to Skagerrak Forlag at JORN@LMF.NO. Prizes will be awarded for all suggestions that we use. Information on all harbours in the entire Harbour Guide series is available at www.havneguiden.no, along with a large number of additional notes.

Have a good trip

Finally, we would like to wish you and your crew many wonderful voyages along the coasts of Slovenia, Croatia and Montenegro. We hope you will find this Harbour Guide useful when planning your trip at home on the kitchen table and when at sea. See you out there!

Emma Glaumann, Joakim Hermansson & Per Hotvedt

Practical information

Currency

The euro is used in Slovenia and Montenegro. Croatia still has its own currency, the kuna. Cash is accepted everywhere. Payments can be made by credit card at more and more places in the area, and the most widely accepted cards are VISA and MasterCard. American Express and Diners Club are also accepted at many places.

Border controls

Slovenia and Croatia are full EU member countries. Montenegro is an EU candidate country and is still in the process of negotiating membership. Slovenia is part of the Schengen border-free area. Croatia and Montenegro are not Schengen area states so there are still border controls for these countries.

Climate

The coasts of Slovenia, Croatia and Montenegro have a very comfortable Mediterranean climate with hot summers and mild and humid winters. The spring in March and April quickly passes into summer between May and September. Autumn is in October and November. The area experiences around 2,700 hours of sunshine a year, with 8 to 12 hours of sunshine a day in the six summer months. Most rain occurs between October and March, with summer rain often in the form of showers that quickly pass. Visibility is usually very good and fog is rare. Heat haze sometimes occurs in early summer mornings before the sun rises and the wind begins to blow.

Air temperatures

	Spring	Summer	Autumn
North Adriatic	14-18	22-29	17-22
Middle Adriatic	15-20	21-30	19-25
South Adriatic	16-21	21-32	19-26
Hours of sunshine/day	6-7	8-12	7-9
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Water temperatures			
water temperatures	Spring	Summer	Autumn
North Adriatic	Spring 12-17	Summer 17-23	Autumn 17-20
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North Adriatic	12-17	17-23	17-20

Winds

The most commonly occurring wind in the summer is the *mistral* (*maestrale*), a northwesterly to southwesterly sea breeze that blows from offshore to onshore. Wind direction follows the path of the sun and wind strengths begin with a gentle breeze around Force 3 in the morning to Force 5 or 6 in the early afternoon. Wind speeds then fall away throughout the afternoon and early evening.

The *bora* is an unpredictable dry and cold northerly wind. Gusts can be very strong and can reach storm strengths in the narrow channels between the high islands in the archipelago. The *bora* is strongest closest to the coast but subsides out to sea. It almost only occurs in the winter and is usually forecast well in advance with weather warnings.

The *sirocco* or jugo is a warm, humid southerly wind that quite often carries sand and dust all the way from the Sahara. The wind builds up and fades over a couple of days, with strengths of Force 4 up to Force 8. *Sirocco* rarely occurs between March and June.

Currents and tides

You rarely need to take the weak northerly current which runs along the coast into consideration. It does, however, affect water quality and the development of algal blooms. The current turns south in the delta of the river Po, taking with it dirty water and providing algal blooms along the Italian side of the Adriatic with nutrition. The water on the east side of the Adriatic is very clear, with almost no algal blooms. In the southern part you can, under favourable conditions, see as far down as 40 metres; 20 metres in the northern Adriatic.

The tidal range in the northern parts of the Adriatic can be as much as 1 metre, but is negligible in the south and half a metre in the central parts. Salinity is high, around 3.8 %.

Weather forecasts

All larger harbours issue a reliable daily 3-day forecast for the surrounding waters. There are also a number of internet weather forecasting services. The coastal radio stations in Rijeka, Split and Dubrovnik broadcast weather forecasts in both Croatian and English on VHF at 0545, 1245 and 1945 UTC on the following channels:

- Radio Rijeka (north Adriatic) VHF channel 04, 20, 24 and 81
- Radio Split (central Adriatic) VHF channel 07, 21, 23, 28 and 81
- Radio Dubrovnik (south Adriatic) VHF channel 04, 07, 28 and 85

Buoyage and charts

The IALA Buoyage System A is used in the waters of Slovenia, Croatia and Montenegro, so follows the convention of a red mark on dangers or walls to port and green to starboard on entry. The waters are well marked and lit, with many of the lights having been operated for hundreds of years. The light characteristics, heights and intensities of lights in the approach are specified in the text for each harbour. The waters are generally easy to navigate.

All boats which sail in these waters are required to hold the paper charts on board which show the areas sailed through, a requirement which all serious charter companies enforce. Charts are detailed and depths specified in numbers and with an accuracy of up to 0.5 metre. Always exercise great caution.

Magnetic deviation and declination

Magnetic declination, the difference between magnetic and geographic north, is almost completely negligible in this area. Be aware that your compass is also affected by magnetism onboard, for example from the engine, batteries and electrical cables. Loose metal objects such as tools, torches and anchors can also have an effect. Magnetic deviation, the difference between magnetic north and compass north, can also be affected by boat heading and angle of heel.

Anchoring

The sea bottom in most of the area is sand or clay and anchor holding is good, though some areas can be stony and seaweed covered with poor holding. Holding conditions are described for each harbour. Make sure you lay out enough chain or anchor line, at least five times the depth and dig the anchor in securely by reversing. Make sure there is enough room to swing towards land and other boats if wind direction changes. Run an extra line ashore where required using your dinghy.

Berthing, tying up and anchoring

Each harbour page has a description of how to tie up. In almost all places, reverse in and tie up stern to the jetty or the quay and bow to either the harbour's mooring lines or the boat's bow anchor. Be careful where you drop anchor and where your anchor chain or line lies. We have seen many examples of the chaos that ensues where boats lay anchor chain across the chains of other boats. The water is normally crystal clear down to the bottom so it should be easy to avoid this.

There is usually a friendly person on the quay ready to hand bow mooring lines to your crew to then run the line to the bow and secure it. If there is no one on the quay, put a crew member ashore who can pass the mooring line to a crew member onboard.

It is occasionally shallow alongside jetties and quays, so tie up bow-to in these harbours. Most boats only have an anchor winch at the bow, therefore prepare the reserve anchor for dropping at the stern if there are no mooring lines.

Skills and documentation

Skippers of leisure boats that enter Croatia must take the shortest route possible to the nearest Customs clearance port.

Year-round Customs clearance ports

Umag, Poreč, Rovinj, Pula, Raša, Bršica, Rijeka, Mali Lošinj, Senj, Zadar, Šibenik, Split, Ploče, Metkovic, Vela Luka, Korčula, Ubli (Lastovo) and Dubrovnik Gruž.

Customs clearance ports between 1 April and 31 October

ACI Marinas in Umag, Novigrad (Istria), Sali and Božava (Dugi Otok), Primošten, Hvar and Stari Grad (Hvar), Vis and Komiža (Vis) and Cavtat.

Taxes must be paid as part of Customs clearance: the tourist tax for the crew and the safety and environmental tax, with the amount based on the boat's length and engine power. Valid documents must also be presented. These include a purchase receipt, proof of VAT paid, certificate of ownership, insurance policy, certificate of seaworthiness and a crew list including nationality. Charter companies should have prepared all the documents for you. Those wishing to skipper a charter a boat in Croatia must present documentation of their seafaring competence and a VHF certificate.

A complete set of boat and crew documents must always be kept on board boats sailing in Croatian waters and are to be submitted to the harbourmaster when tying up in marinas and larger harbours. Documents are checked and are returned on departure after the harbour fee has been paid.

Similar requirements apply in Slovenia and in Montenegro

Refuelling and provisioning

At the start of a charter, boats are typically handed over to skippers with full fuel and water tanks and are required to be returned in the same stage, with a charge being made where tanks are not full. Each harbour's fact box specifies if you can refuel or fill water tanks. Tap water is generally high quality and potable. We recommend that you don't drink water from your boat's tanks and use bottled water instead; also be careful with tap water in the hottest months when bacteria can flourish.

On payment of a charge, most charter companies offer a provisioning service, which allows you to depart immediately. Otherwise you can buy the essentials in most inhabited harbours. Fruit and vegetables can be bought at local morning markets and bread directly from bakeries. Larger towns and villages often have well-stocked supermarkets, a pharmacy, an ironmonger and other specialist shops and a post office and bank. Information is provided for each harbour.

Safety equipment

All serious charter companies ensure that their boats are equipped with safety equipment such as lifejackets, flares, fire blankets, a first aid kit, a torch, knife and VHF radio. Bring your own lifejacket with you to ensure you have a jacket that fits; particularly important for children or those who require less common sizes or features.

Emergencies

There is a well-developed and effective sea rescue service in Slovenia, Croatia and Montenegro, which can be called in the event of an emergency. Telephone 112 or issue a mayday on VHF channel 16.

Protection of the environment

The Adriatic's environment is not only very beautiful, but also fragile. The impact of leisure boats on the environment is marginal when compared with releases from agriculture, industry and shipping in the area. However, we who enjoy sailing for pleasure can set a good example. Respect bird reserves, nature reserves and national parks. Use common sense, make sure you take your rubbish away with you and dispose of it in harbours with waste collection facilities. Don't release anything into the sea that can harm the ecosystem and use holding tank stations where available.

Sources:

The Croatian National Tourist Board, with special thanks to Marija Bakovic, Croatia Yacht Club

The authors



Emma Glaumann

Emma Glaumann is a selfemployed graphic designer who has been sailing since she was a child. She and her husband Joakim Hermansson have produced two Harbour Guides (Havneguide) for their Swedish home waters, one on the Stockholm archipelago and the other on Sweden's large lakes and canals. The

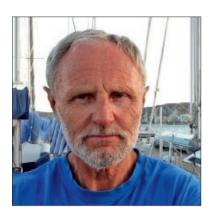
couple have also published a Harbour Guide to the Baltic coast from Flensburg, Germany to Gdansk, Poland. For Harbour Guide Croatia, Montenegro and Slovenia, Emma prepared the aerial photographs for the area north of Split and collated the charts, aerial photographs and information such as approaches and depths for all other harbours.



Joakim Hermansson Yachting journalist Joakim

Hermansson began his sailing career in childhood as a dinghy racer and has since progressed to long distance cruising aboard rather larger craft. He was editor-in-chief of Sweden's leading sailing magazine for eight years, has twice been named Swedish Ocean Racer of the Year

and has many years of experience as a European Yacht of the Year jury member. As noted above, Joakim and his wife, Emma Glaumann, have co-authored a number of Harbour Guides; Joakim's focus has been to develop well-structured and informative text that provides the information that sailors really need. For Harbour Guide Croatia, Montenegro and Slovenia he wrote the text for all harbours north of Split.



Per Hotvedt

Per Hotvedt teaches History and Journalism to secondary school students but has had a life-long passion for the sea. The son of a sea captain, by the age of eleven Per had crossed both the Atlantic and the Pacific oceans and experienced his first hurricane. Since then he has sailed the Skagerrak,

the North Sea, the Baltic Sea and the Caribbean, where he also ran a charter company. In 2000, he took a year's sabbatical from teaching to sail around the Mediterranean with his partner and returned to these waters in 2012 before going on to sail the Ionian and Adriatic. Per's first Havneguide, published in 2008, covered the west coasts of Sweden and Denmark. His next covered the Swedish Baltic coast and the islands of Gotland, Öland and Bornholm. His most recent Harbour Guide to Greece was published in German in 2014. He has spent the last few years sailing the Adriatic, writing the text and preparing the illustrations for the harbours south of Split in Harbour Guide Croatia, Montenegro and Slovenia.