

Blue World Institute of Marine Research and Conservation

ADRIATIC DOLPHIN PROJECT – NORTH DALMATIA

VOLUNTEER INFORMATION

2015



ADRIATIC DOLPHIN PROJECT

The Adriatic Dolphin Project (ADP) is a scientific research project conducted by the Blue World Institute of Marine Research and Conservation. It is primarily focusing on the biology and ecology of the common bottlenose dolphins (*Tursiops truncatus*) and other cetaceans inhabiting the Adriatic Sea, with the aim to provide scientifically supported knowledge base for the conservation of the cetacean species and their natural environment.

The ADP was started in the waters around the island of Lošinj in the northern Adriatic Sea in 1987, with the aim to study and help protect a local bottlenose dolphin community. Initially a small project, it evolved throughout the years to include, besides the photo-identification as a ground method, research on the bottlenose dolphins' diet, behaviour, underwater acoustics, population genetics and interactions with human activities. In 2007 the research expanded to a new area - archipelago around the island of Vis in the central Adriatic Sea. Another expansion happened in 2013 when a boat based research project was initiated in North Dalmatia. Today, with over 20 years of continuity, the ADP is the longest ongoing research project on the bottlenose dolphins in the Mediterranean.

As a non-governmental organization, Blue World Institute relies on the help from eco-volunteers. We hope that this Information Pack will help you make a decision to join us and support our research and conservation efforts.



Common bottlenose dolphins (Tursiops truncatus), playing close to Nature park Telašćica, Dugi Otok

PROJECT BACKGROUND

The common bottlenose dolphins are highly mobile, travelling between 30 and 50 kilometres per day, sometimes even more. This creates difficulty for the researchers who are limited by logistical factors and weather conditions. As a result, studies of bottlenose dolphins and other cetaceans usually cover only a part of the population's habitat. Despite the long tradition, the ADP research activities were so far limited to relatively small geographic areas around the islands of Lošinj and Vis due to locations of the field stations. This left great portions of the Adriatic Sea as "blind spots" for which there is no relevant data about the status of the cetacean species.

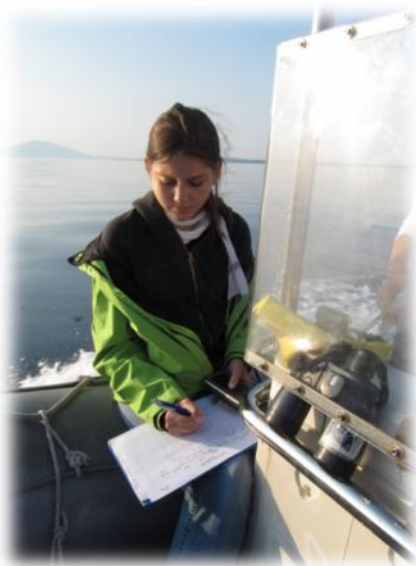
To overcome the limitations defined by the locations of the field bases, we developed an idea of a "mobile field station". A large boat that provides living facilities would eliminate the need to return to the same field station after every area survey. Such a boat could also provide logistics (working space, storage for equipment and fuel). Having such a "mobile field station", researchers gain flexibility and can adapt to changing weather conditions. Every day area surveys can start from a different location. If the weather worsens in the north of the study area, the team can move to the south and do the research there.

In 2012 the Blue World Institute was donated a 14m wooden kutter, named MB Anika, for the duration of the study. This opened new possibilities and in 2013 we decided to start a new research project in an area between the two existing study areas. With the new research project, we are gaining detailed insight into the status of the bottlenose dolphins inhabiting the area that stretches across 200 km and ultimately contributing to conservation of their natural environment. The research focuses on population structure and dynamics as well as behaviour and interactions with boat traffic and fisheries (most notably fish farms). Results of this study will help understand the problems that this endangered and protected species is facing today. By communicating the results to the governing bodies and local communities we aim to raise awareness and contribute to the creation of positive attitude towards integrated conservation measures.

The areas of the Adriatic Sea where the research is conducted as a part of the Adriatic Dolphin Project. The Lošinj field base is located in the north, the Vis field base in the south. The thick blue ellipse shows the study area in the North Dalmatia



The basic method utilized in the research of the Adriatic Dolphin Project is photo-identification. It is a procedure where the researchers take photographs of the dolphins' dorsal fins and later analyze them in order to identify every individual dolphin. The results of the photo-identification are then used to estimate various parameters, including the abundance, demographics, residence, movement patterns etc. In conjunction with the geographic and environmental data this method helps explain complex interactions between bottlenose dolphins and their habitat. By carefully examining the results of the photo-identification and combining them with the data from other areas in the Adriatic Sea we can obtain the fine scale overview of the population structure and habitat use in order to pinpoint the areas of highest importance for the conservation of the bottlenose dolphins.



The study area is characterized by developed tourism, numerous marinas and harbours which, together with the beautiful archipelago that includes a National park and a Nature park, attract thousands of people. As a result, the boat traffic is intense in the summer. By studying the behaviour of the bottlenose dolphins and how they interact with boats we can establish and measure effects of these interactions. Detailed understanding of how the human activities influence the bottlenose dolphins on the population level will help direct the conservation measures where they are needed the most. To address these issues, the team will collect and analyze the data on the behaviour and interactions between the dolphins and the boat traffic, but also fisheries and aquaculture.



Tourists slow down to observe bottlenose dolphins in National Park Kornati

VOLUNTEERING AT THE ADRIATIC DOLPHIN PROJECT

The crew of the Adriatic Dolphin Project has years of experience in cetacean research and organizing eco-volunteering program. The program allows people with enthusiasm for marine environment, particularly dolphins, to join the research team in their everyday work and have the real hands-on experience of the life of a cetacean biologist. The eco-volunteers take part in all the activities of the Adriatic Dolphin Project: research, public awareness and conservation. Their role in this project is invaluable.

No specific knowledge or experience is required to join the program. However, students of biology and similar courses will find it most useful and gain important field work experience. During the course, eco-volunteers are trained in basic research techniques that include data collection during navigation, searching and dolphin sighting, data storage and analysis. Evening lectures provide theoretical background of research topics, giving eco-volunteers more in depth information about the purpose of the project. Also, simply by living on the boat they learn about basic navigation and sailing skills.



The daily routine of the whole team depends mostly on the current weather conditions. Weather forecast is checked on an almost hourly basis to help making plans and routes for the next days. If the weather is fine and the sea is flat, the research team will board the research vessel and head off in search for dolphins, while the skipper stays with the mother ship. The area surveys can last from half an hour to up to 10 hours, but usually around 4-5 hours. Sometimes dolphins are found within 10 minutes, sometimes it takes hours to spot them and sometimes the team returns to field base without having spotted anything (but this happens very rarely). This means patience is required. During the area surveys everybody on the boat has a task. While searching for dolphins, eco-volunteers help researchers writing down environmental and navigational data using the GPS device. When dolphins are spotted they will take geographic positions and notes on the group size, composition, behaviour etc. The time spent with dolphins depends on how long it takes to collect all the necessary data, usually between 30 min and one hour. Not only dolphin sightings are recorded – the team will opportunistically stop to take photos of other protected, endangered, rare or simply interesting species, mostly tuna (*Thunnus thynnus*), common European shag (*Phalacrocorax aristotelis*) and loggerhead turtle (*Caretta caretta*). After returning to the mother ship, eco-volunteers help out in transferring, storing and analysing the collected data.



On windy days the team will either transfer the mother ship to a new location or spend time in a harbour or sheltered bay, analysing the data, writing the reports, preparing the public lectures, but also taking care of the boat maintenance and doing the small repairs. Keeping the boats maintained is equally important as quality data collection. While in a harbour, eco-volunteers can also use their free time to visit the coastal towns or island villages. There will also be lots of time for swimming, snorkelling, sunbathing or simply relaxing.



You must be aware that the research team, skipper and eco-volunteers live together on the boat which leaves little room for privacy. Everybody shares room, living and working space and daily tasks so flexibility and relaxed spirit are vital for the good atmosphere on board. The research activities have priority and there may be days when the whole team will be working long hours. However, there will be plenty of free time (when it's too windy to look for dolphins) when you can enjoy swimming, snorkelling or simply relax on the deck. Everyday tasks (dish washing, boat maintenance, cleaning...) are divided among all team members.

People participating in this project must meet following requirements:

- In good physical condition, to be steady on the legs and able to swim
- Able to tolerate hot weather and long periods on the boat under the sun
- No sea sickness
- Speak English
- Over 18 years old
- Read the application form, accept the conditions and sign the declaration
- Be aware that the project director or project manager has the right of expelling you from the project, in case your behaviour and attitude may obstruct the normal research activities.

MOBILE FIELD STATION - MB ANIKA

The MB Anika is used as a mobile field station, providing living facilities and logistics. The team and eco-volunteers live on this boat during the 10 days trips. The boat is a 14 meters long, two-mast, wooden kutter, built in 1934 in Germany. It went through complete reconstruction in 2000 in order to make it sea worthy for years to come, but the look and feel of an old-timer were retained. All the basic



living facilities are provided: two cabins, kitchen/dining room, toilette with solar shower and lots of storage space for the equipment. The cabin for the eco-volunteers is spacious and has two beds (bed sheets are provided), a table, cupboard and shelves for storing clothes and other personal items. If you decide to join us, you will be sharing this cabin with one more eco-volunteer. The smaller cabin in the front of the boat is for the research team. The kitchen is equipped with a cooker, oven, refrigerator and sink – everything needed for preparing delicious meals. Dining room or cabins can also be used as working space for data analysis and other computer work. The toilette with shower is on the deck and is shared by everybody on the boat. Warm water is provided via sun-heated shower during sunny days.

The boat is equipped with all the safety gear, GPS plotter and 12V/24V power outlets. 220V power outlets are available while the engine is running and during the stays in harbours when the boat is connected to the main power network. While at sea, 220V power supply is limited to only a few hours due to capacity of batteries (enough to recharge a phone or camera). High-speed internet is not available, but mobile, low-speed internet connection will be available for checking e-mails and normal web browsing (no Youtube or any heavy downloads).

The boat deck provides plenty of room for resting and sunbathing. There is also sunshade for the days when the sun is too strong. When the weather conditions are favourable sails can be used which offers great experience of navigation in the absence of the engine sound and opportunity to learn sailing technique.



RESEARCH VESSEL – RIB

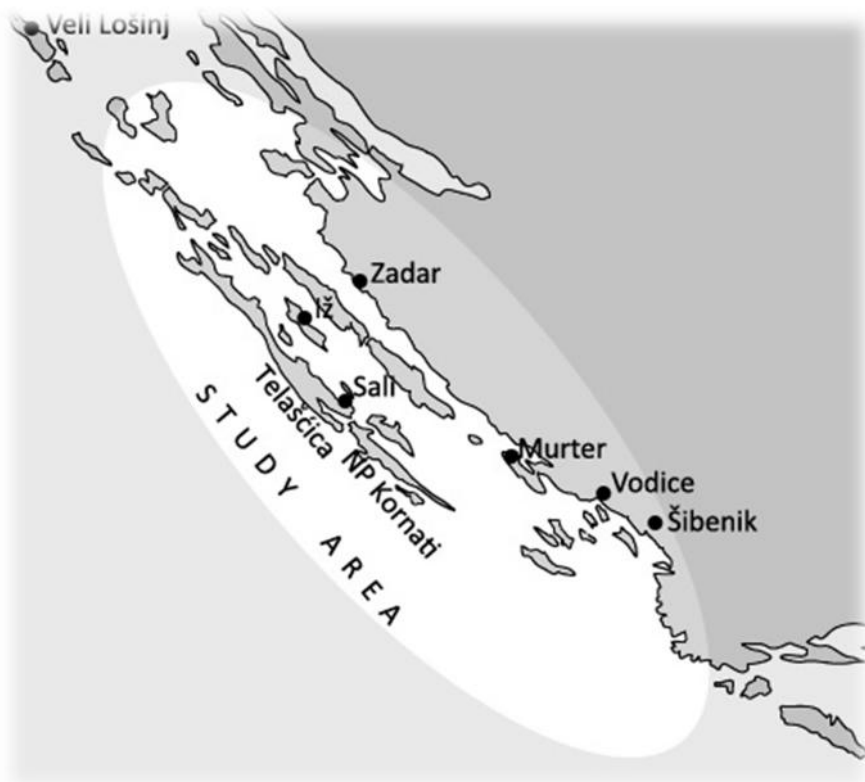
A rigid hull inflatable boat (RIB) is used for conducting area surveys in search for dolphins. It is a Valiant 520, powered with a 55HP Yamaha outboard engine. The RIB is equipped with all the necessary safety gear and a sun shade for long hours in the summer heat. Speed and low fuel consumption allow for covering large portions of the sea in search for dolphins, while small size and manoeuvrability allow for easy approach to dolphins and collection of the photo-identification and behavioural data while keeping the disturbance at minimum.



MB Anika and the research RIB, moored in the port of Mali Iž

THE STUDY AREA

The study area encompasses the archipelago of the northern Dalmatia, Croatia, from Virsko more in the north to the islands of Žirje and Zlarin in the south. The region of Dalmatia is famous for its beautiful nature, pristine sea, long history that dates back to pre-roman times and gastronomy - locally produced olive oil and wines in combination with the fresh fish are a “must try”. The beautiful archipelago consists of hundreds of islands and diverse coastline. During your stay, the team will visit many of them and you can use the opportunity to get to know the local culture, enjoy the sightseeing and panoramic walks, or simply have a rest on one of many beautiful beaches. Diversity of islands, bays and coastal towns makes each day a unique experience.



The study area

Some notable locations that you are likely to visit are:

Zadar

An ancient coastal town, situated in the northern part of the study area, dates back to 9th century BC. The roman Forum, numerous Romanesque churches and typical Mediterranean architecture offer great sightseeing. The best way to get to know Zadar is to get lost in the labyrinth of small alleys where you can find a perfect café or lounge bar for you.



Murter, Island of Murter

This is the starting point of the trip, where you will join the team. Murter is a small village, famous for its long tradition of wooden shipbuilding. Here, you can enjoy walks through the labyrinth of traditional, stone-built houses, visit the known sandy beach Slanica or have a rest and enjoy a swim in one of the more isolated bays on the southern side of the island.



National Park Kornati

This is one of the best known nautical tourism destinations in Croatia. The Kornati archipelago consists of 89 islands, islets and reefs. The vertical cliffs of the outer chain of the islands, some of them 90m high, offer a spectacular view. Snorkelling or SCUBA diving in the crystal clear sea reveals the real richness of biodiversity hidden beneath the surface.



Nature Park Telašćica

Telašćica is a long sheltered bay in the southernmost part of the island of Dugi otok. This area is bordering with the National Park Kornati and is famous for its geological phenomena - the salty lake Mir and vertical cliffs that rise 160m above the sea and drop down to 90m below the surface.



Sali

Sali is a typical fishermen village on the island of Dugi otok. Local tradition of olive oil production dates back to the ancient Greek times. You can visit the Sali Olive field – a botanical reserve where some of the trees are more than 700 years old.



PRACTICAL INFORMATION

What to bring

Space on the boat is limited. Please, try to bring no more than one large bag and a backpack. Take your usual summer clothes. Bear in mind that there is no washing machine on the boat. Summers in Croatia are hot, but there can be chilli days, especially at sea. Therefore, we strongly suggest that you also bring:

- Light windproof jacket
- Long sleeves shirt and a pair of jeans trousers

Other personal items:

- Sunscreen (SPF 50+), sunglasses and hat
- Swimming and snorkelling gear
- Laptop, camera
- Towels
- Biodegradable (if possible) shower gel and shampoo

Documents and insurance

Please, check if you are required to have Visa to enter Croatia. Citizens of some countries can travel to Croatia only with a valid identity card, but we suggest that you take the passport with you.

We recommend that participants provide themselves with travel insurance.

OTHER USEFUL INFORMATION

Official language is Croatian, but almost everybody can speak at least basic English. Young people generally speak good English, while many also speak German and Italian.

Croatian currency is Kuna (KN). 1 EUR is around 7.6 KN; 1 USD is around 6.5 KN.

Time zone in Croatia is +1UTC; +2UTC in summer

Power standard is 220V/50Hz.

220V plugs on the boat are only available for several hours daily and only for phone/tablet/laptop/camera chargers. No hair dryers or similar appliances are allowed to be plugged in while on battery power. While the boat is in the harbour and connected to the main power network then there is no limitation.

Average daily air temperature is 26 °C, with average of 350 hours of sunlight monthly in the summer. The average sea temperature is 24 °C during the summer.

TRAVEL INFORMATION

Eco-volunteers need to make their own travel arrangements. Travel costs to and from the starting point are not included in the fee.

Starting point of the field trip is **Murter**. However, there are not many direct connections to Murter, so the research team will organize a pick-up in **Vodice**, which is well connected and is a 20 minutes drive from Murter. There are many ways to reach Vodice, here are some suggestions:

By plane

Fly to Zadar Airport

Zadar Airport is located around 60 km north of Vodice. It is well connected with many European cities during the summer. You can take a taxi or a local bus from the airport to the Zadar main bus terminal. From there, you can proceed to Vodice by bus (1 hour drive and costs around 60KN/8EUR). There are buses from Zadar to Vodice almost every hour. Alternatively, you can take a taxi directly to Murter, but it's much more expensive than the bus.

For information about flights to Zadar Airport, check www.zadar-airport.hr/en, www.ryanair.com/en, www.croatiaairlines.com, www.germanwings.com or www.lufthansa.com

For information about bus departures from Zadar to Vodice, check www.autobusni-kolodvor.com/en/timetable.aspx, or call +385 (0)60 305 305 (the machine will answer in Croatian, just wait for a few moments until agent answers).

Fly to Split Airport

Split Airport is located around 100 km south of Vodice. It is well connected with many European cities during the summer. You can take a taxi or a local bus from the airport to the Trogir main bus station. From there, you can proceed to Vodice by bus (1.5 hours drive and costs around 60KN/8EUR). There are buses from Trogir to Vodice almost every hour. Alternatively, you can take a taxi directly to Murter but it's much more expensive than the bus.

For information about flights to Split Airport, check www.split-airport.hr/index.php?lang=en or www.croatiaairlines.com.

For information about bus departures from Trogir to Vodice, check www.autobusni-kolodvor.com/en/timetable.aspx, or call +385 (0)21 882 947.

Fly to Zagreb Airport

Zagreb Airport is located around 300 km north of Vodice. It is well connected with many European cities during the summer. You can take a taxi or the airport bus from the airport to the Zagreb main bus terminal. From there, you can proceed to Vodice by bus (4 hours drive and costs around 150KN/20EUR). There are several buses from Zagreb to Vodice every day.

For information about flights to Zagreb Airport, check www.zagreb-airport.hr or www.croatiaairlines.com.

For information about bus departures from Zagreb to Vodice, check www.akz.hr/default.aspx?id=260, www.autobusni-kolodvor.com/en/timetable.aspx, or call +385 (0)1 6112 789.

By bus

Vodice is located on the main coastal road, between Zadar and Šibenik. Almost all the buses that connect coastal towns pass through Vodice, so it is easy to find a convenient line for your arrival, no

matter if you are coming from the north or from the south. You can check the time schedule here: www.autobusni-kolodvor.com/en/timetable.aspx, but it is best if you call one of the bus terminals for the most up-to-date information

Zadar bus terminal - +385 (0)60 305 305 (machine will answer in Croatian, just wait for a few moments until agent answers).

Split bus terminal - +385 (0)60 327-777

Trogir bus terminal - +385 (0)21 882 947

Zagreb bus terminal - +385 (0)1 6112 789

Rijeka bus terminal – +385 (0)60 302 010

By car

The easiest way to arrive directly to Murter. You can leave your car on one of the parking lots in Murter and, depending on the current situation, the research team might even find a free parking place for your car (check this option with the project leader before arrival).

If you are arriving via Zagreb, take the highway in direction Split and follow it for around 280 km. Take the “Pirovac” or “Murter” exit and drive for another 30 minutes following the road signs for Murter.

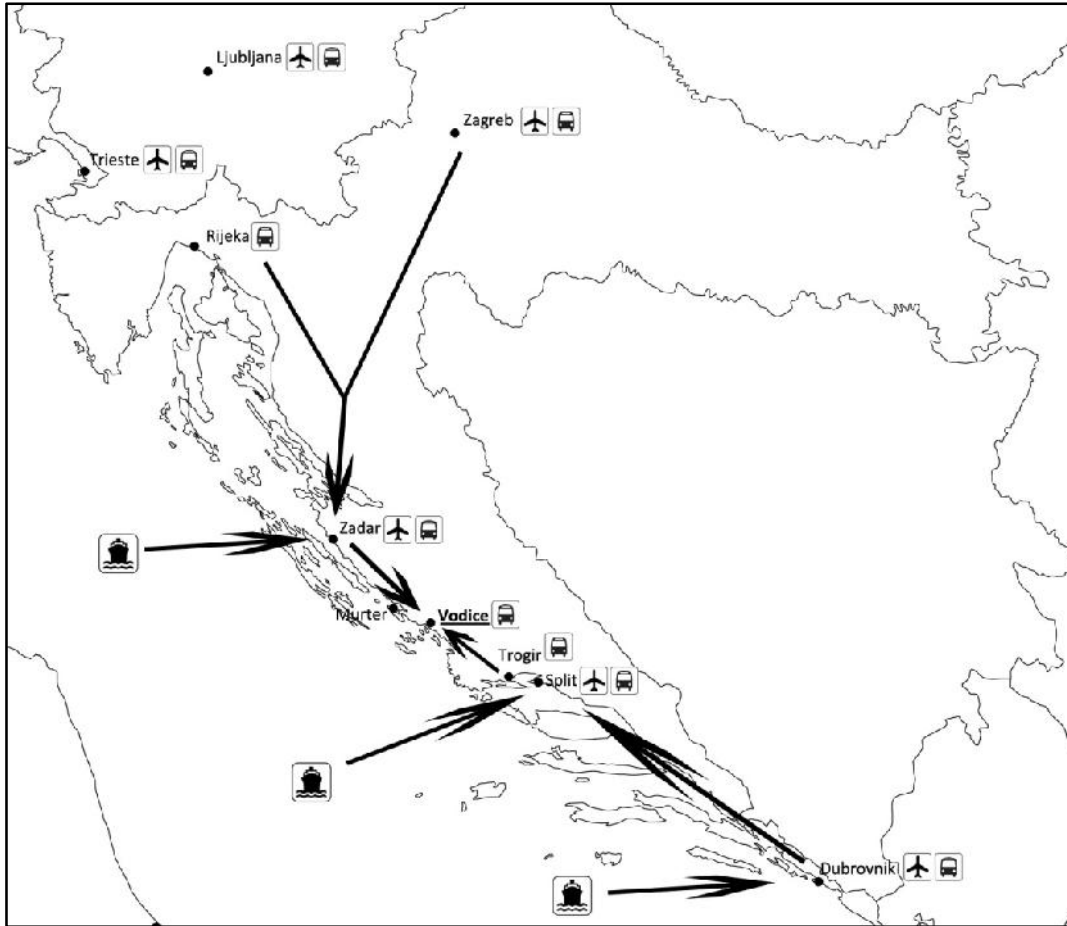
If you are arriving via Rijeka, take the coastal road towards Senj. In Senj, turn left and climb the mountain road to the A1 highway. Enter the highway direction Split and drive around 180 km. Then take the “Pirovac” or “Murter” exit and drive for another 30 minutes following the road signs for Murter.

If you are arriving from the south, via Split, take the highway in direction Zagreb and follow it for around 80 km. Take the “Pirovac” or “Murter” exit and drive for another 30 minutes following the road signs for Murter.

By boat

Zadar, Split and Dubrovnik are Croatian coastal cities that have boat connections to Italy. If you are travelling from Italy, this might be an option. Check www.jadrolinija.hr for time schedules. Once you cross the Adriatic, proceed to Vodice by bus.

Travel information provided here was correct at the moment of writing this Information Pack. However, we strongly suggest that you check connections and times before travelling.



Main direction and means of transport to arrive to the meeting point - Vodice

DATES AND PRICES

All volunteer stages begin on Wednesdays and end on Fridays (10 days). Eco-volunteers should organize their travel to arrive to the meeting point (Vodice or Murter) during the Wednesday and leave during the Friday. There are two places available in each stage.

Following are the start and end dates of the volunteering stages in 2015:

Stage	Arrival date (Mondays)	Departure date (Fridays)	Price (EUR)	Discount price (EUR)
1	3 June	- 12 June	945	850
2	17 June	- 26 June	945	850
3	1 July	- 10 July	990	890
4	15 July	- 24 July	1080	975
5	29 July	- 7 August	1080	975
6	12 August	- 21 August	1080	975
7	26 August	- 4 September	990	890

If you want to join the eco-volunteering program, but these dates are not convenient for you, contact the project leader directly (rggur.pleslic@blue-world.org) and see if any other dates are possible.

If you want to combine volunteering at ADP Lošinj and ADP North Dalmatia, please contact the project leader directly rggur.pleslic@blue-world.org

Discount available to:

- Students – you will need to provide a document that proves your current status
- Croatian citizens – Croatian identity card will be required
- Two or more stages – if you decide to stay longer than 10 days with us
- Returning volunteers – if you already volunteered with the Adriatic Dolphin Project

Included in price:

- Accommodation on the MB Anika during the volunteering stage
- Food (breakfast, lunch and dinner) and non-alcoholic drinks during your stay (except the last Friday)
- Mooring fees in visited ports
- Tourist tax
- Internet access (mobile network, limited depending on the reception and area)
- Scientific supervision during the research
- Lectures by the researchers
- Certificate of attendance

Not included in price:

- Travel costs to and from the project location
- Meals and drinks at restaurants and bars
- Alcoholic drinks on the boat
- Spending money

HOW TO BOOK?

If you are interested in this eco-volunteering program and want to take part in it, these are the necessary steps to book a place:

1. Contact us

You can inquire about further details and the available dates by contacting us by e-mail: info@blue-world.org or grgur.pleslic@blue-world.org or by phone: +38551604666 or +385989760271.

2. Fill out the application forms

The application forms will be sent to you by e-mail upon request. The forms contain Application Form, Membership request and Disclaimer Declaration. You can fill them out on the computer or print them and fill them out in handwriting.

3. Book a place

To book a place send us filled out application forms via e-mail or fax: +38551604668. When we receive the forms we will keep a place for you for two weeks. Within these two weeks a minimum of 50% of the fee needs to be paid. Otherwise, we will make your place available to others. If you are making a late booking you can arrange payment directly with the project leader (grgur.pleslic@blue-world.org)

4. Payment

You can make payment via bank transfer or Paypal. Details for bank transfer are:

Zagrebačka banka

Ilica 241

10000 Zagreb

SWIFTCODE: ZABHR2X

IBAN: HR0923600001101307847

For payments via Paypal, please send the required amount to this address:

info@blue-world.org

Note that transfer expenses need to be covered by the participant.

5. Arrival

Once the booking and payment is done, contact the research crew directly to arrange your arrival or get more advice on how to arrive. You can contact the project leader directly: grgur.pleslic@blue-world.org