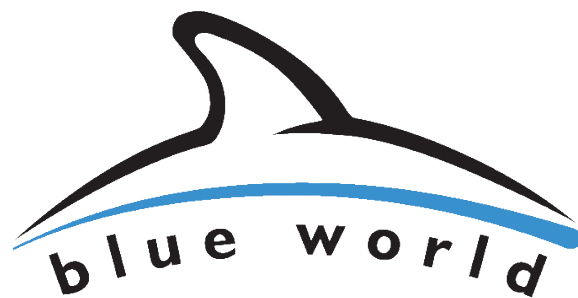


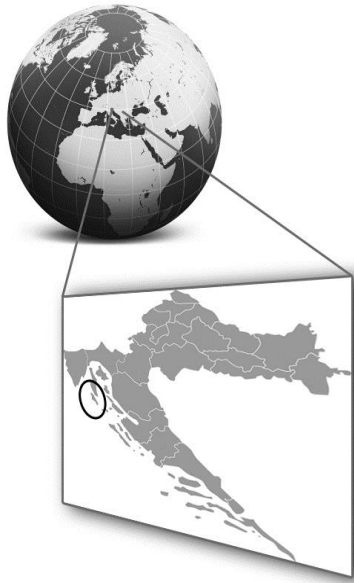
Blue World Institute of Marine Research and Conservation

# **Internship at Adriatic Dolphin Project**

2014/2015



## ADRIATIC DOLPHIN PROJECT - LOŠINJ



The Adriatic Dolphin Project (ADP) is the longest ongoing study of a resident population of bottlenose dolphins (*Tursiops truncatus*) in the Mediterranean Sea. It is run by the Blue World Institute of Marine Research and Conservation (Blue World), a Non Governmental Organisation, formed to carry out science, conservation and education of the marine environment with particular emphasis on the Adriatic and Mediterranean seas.

The aim of the project is to provide an overall picture of the population status and dynamics of the bottlenose dolphins around the islands of Lošinj and Cres. Our research focuses on dolphin population dynamics, photo – identification, behavioural sampling, acoustic monitoring, and the collection of stranding data for genetic, forage ecology and toxicological analysis. Data is used to produce a regular report on the status and ecology of the population and to offer solutions for their effective conservation.

## RESEARCH PROCEDURES

Photographs of the permanent marks, such as scars and notches on the dorsal fin, are crucial in recognition of an individual on a long-term basis. By consulting a catalogue of the dolphins we monitor the range of their movements, the composition of groups and their social behaviour. A statistical mark and recapture method is used to define population size to determine the status of the population. Dolphin sighting data are imported into a GIS (Geographic Information System) to link bottlenose dolphin presence with natural and anthropogenic variables. Habitat preference or avoidance is also analysed. The spatial distribution of dolphins and habitat use are based on the GPS (Geographic Position System) data obtained in each dolphin encounter.

Other research includes:

Behavioural sampling that includes estimation of behaviour budget of the population in general, changes in behaviour and behaviour responses to the vessel traffic;

Bio-acoustic research that allows us to study the influence of the noise pollution on the bottlenose dolphin distribution in the study area;

Analysis of stomach contents tells us the species of fish the dolphins eat. Comparing those to the fisherman's catch gives us a better understanding of the impact of humans on the dolphins. We combine this data with knowledge of water



currents and submarine topology and input it into a GIS. This enables us to pinpoint areas of particular importance to the dolphins, such as feeding and refuge areas.

Additionally, Blue World seeks to promote conservation of all threatened marine organisms and the entire marine environment through public awareness, education, capacity building and the sustainable development of the coastal and insular areas of the Mediterranean.



#### **ADRIATIC DOLPHIN PROJECT – CREW:**

-Nikolina Rako (Croatia), *ADP head researcher:*

Ph.D. Candidate University of Split, Croatia

M.Sc. University of Trieste, Italy

-Peter Mackelworth (UK), *ADP researcher*

Ph.D. University College of London

Specialized in Marine Protected Areas

-Tihana Vučur (Croatia), *ADP researcher*

mag. oecol. et prot. nat. University of Zagreb, Croatia

-Mateja Zekan (Croatia), *ADP researcher*

M.Sc. University of Trieste, Italy

## BEING AN INTERN STUDENT AT ADP

Besides scientific work Blue World is dedicated to dissemination of knowledge and experience through various programs, and internship is one of them. It is intended for highly motivated students of biology, marine biology, ecology, veterinary and similar courses who wish to get unique theoretical and practical knowledge and experience. Students join the project for a period of at least one month during which they are involved in all activities conducted in Adriatic Dolphin Project. This gives insight into all research procedures and methods used for collection, analysis and publication of data. In return, intern students help in all Blue Worlds activities, including research, education, public awareness, conservation and other everyday tasks.



## ACCOMMODATION

Blue World offers accommodation to internship student in a house in Veli Lošinj. The house is shared among other internship students and researchers, which means there are no single bedrooms. Students must be ready to share a bedroom and house holding tasks (cooking, cleaning, maintenance) with others.

## A DAY OF AN INTERNSHIP STUDENT

Upon arrival at the field base in Veli Lošinj, the internship student will be introduced to our daily routine, acquainted with setting of Veli Lošinj and dealt with duties and tasks. Typically days are spent in the office where students help out researchers or in Lošinj Marine Education Centre. If the weather permits, area surveys are conducted from a small inflatable boat, in search for dolphins. Students usually join the researchers during these surveys where they help out in data collection. Besides these usual tasks, internship students must be ready to „jump in“ depending on the situation. Working hours in the winter time is from 10AM till 4PM with weekends free.



## EXPENSES AND AVAILABLE PERIODS

The cost of the program is 25EUR per day for students. This covers accommodation and food (not alcohol). Travel expenses to and from Veli Lošinj are covered by the student.

Places are available from 1<sup>st</sup> October to 30<sup>th</sup> November 2014; from 1<sup>st</sup> February to 30<sup>th</sup> April 2015; from 1<sup>st</sup> October to 30<sup>th</sup> November 2015. Minimum period is one month.

2014			2015										
Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Winter							Summer season					Winter	

## REQUIREMENTS

Students applying for internship must be:

- Currently studying (marine) biology, ecology or similar
- In good physical condition, to be steady on the legs and able to swim;
- Able to tolerate hot or cold weather and long periods on the boat under the sun;
- Speak English;
- Over 18 years old;

## APPLYING FOR INTERNSHIP AT ADP

Those interested in internship at ADP should contact us in English at: [Tihana.Vucur@blue-world.org](mailto:Tihana.Vucur@blue-world.org). Please, tell us what period you are interested in, what are you studying (current year) and enclose your CV. We will contact you back.

## SOME OTHER THINGS USEFUL TO KNOW

Not all your colleagues will speak English fluently and you are expected to be patient. Furthermore, you should be committed to nature conservation and animal protection and have a positive attitude towards working with people from different countries. We ask that you bring no more than you need, space is limited at the base and washing facilities are available. You do not need special equipment in order to participate.

### THE BOAT

The small (6 m), low noise craft, allows the easy approach of the wild dolphins and follow them for a long time without the animals being disturbed by our presence. The craft is equipped with all safety and scientific gear.



## THE HOUSE

You will be hosted in Veli Lošinj. The house provides bedrooms for researchers, one for interns and one for volunteers, two bathrooms, kitchen, lounge, and a terrace. **A single room is not available.** Beds, sheets and blankets are provided. The daily household duties include shopping, cooking, dish washing, gardening and general housekeeping. Everybody at the project is expected to do his or her share in the household. Two persons a day in turn will be in charge of the cooking, cleaning and washing dishes. Both participants and researchers alternate in housekeeping and cooking shifts. The project is also advertised in other countries, so it is very possible that your colleagues are from different European countries or even further.



## ISLAND LOŠINJ

The coastline of Lošinj is extremely diverse; it consists of many large and small bays and underwater caves. The field-base is located in the old village of Veli Lošinj (3 km distant from Mali Lošinj – the biggest island town in Croatia) on the sheltered east coast of the island. The water falls to a depth of around seventy metres; the seafloor is mainly mud, with areas of sea-grass and limestone reefs. There are more than 95 species of fish found in these waters, and other top predators such as loggerhead turtles, tuna, sharks and swordfish regularly visit this area. The marine environment around Lošinj is the cleanest part of the Northern Adriatic Sea, with underwater visibility of consistently over twenty metres. We encourage you to explore the island and take advantage of the untouched natural environment that surrounds you.



*Town of Mali Lošinj*



*Town of Veli Lošinj - our location*

## Useful information

### Average air temperatures in °C

Jan	Feb	Mar	Apr	May	Jun
7,5	7,6	9,8	13,7	17,7	21,8
Jul	Aug	Sep	Oct	Nov	Dec
24,6	24,3	21,3	16,1	12,1	9,3

-time zone: +1 UTC; +2UTC in summer

-power standard: 220V, 50Hz, round/two-pin

-official language is Croatian, however almost everybody can speak at least basic English and many also speak German

-Croatian currency is Kuna (Kn); 1EUR is roughly 7,5Kn and 1USD is roughly 5,7Kn. You can check current exchange rate on <http://www.hnb.hr/tecain/evazeca.htm>

Modern Veli Lošinj boasts a postal office and several tourist service bureaus, small hotels, shops and an ATM! Major credit cards are accepted in many shops. There are two small harbours, one in the centre of Veli itself, the other in Rovenska.

For additional information on Lošinj, we suggest you to visit the web page: [www.island-losinj.com](http://www.island-losinj.com); [www.veli-losinj-croatia.com](http://www.veli-losinj-croatia.com)

## TRAVEL TO AND FROM LOŠINJ

**The information given here was correct at time of publishing; please confirm timetables, connections and routes personally before undertaking travel.** Students will have to make their own travel-arrangements to Lošinj. Here is some information. Further information can be found at [www.island-losinj.com](http://www.island-losinj.com).

### By bus

#### Rijeka – Veli Lošinj

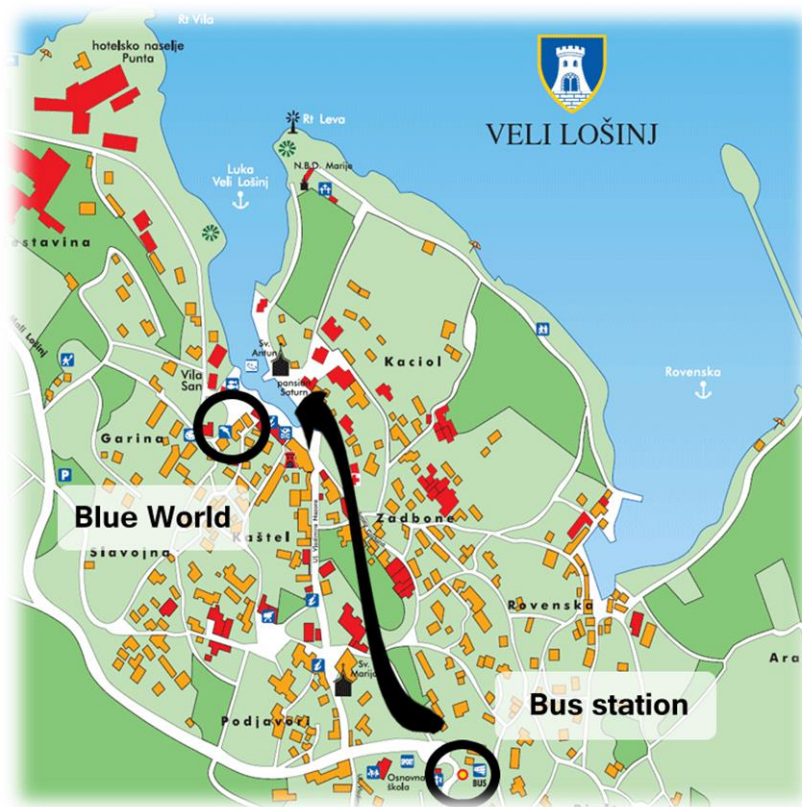
There are buses from Rijeka three times a day: at 6:15, 12:15 and 17:00. Trip takes approximately 3 hours. This schedule might change, so check <http://www.autotrans.hr> for more information.

#### Zagreb – Veli Lošinj

Two buses per day from Zagreb to Veli Lošinj; at 9:00 and at 14:15. Trip takes 7 hours. This schedule might change in summer season or on weekends and holidays, so please check: Autotrans +385 51 231110 or <http://www.autotrans.hr> or Zagreb bus station <http://www.akz.hr>

#### Germany, Netherlands, France, UK, Switzerland, Italy, Slovakia – Rijeka

For more on bus lines that connect Rijeka with other European countries check on Autotrans web pages <http://www.autotrans.hr> (under international travel)



### By boat

Everyday there is ferry from Rijeka to Mali Lošinj at around 2:30 pm; please contact [www.island-losinj.com](http://www.island-losinj.com) or <http://www.krilo.hr/en/index.html> for further information. There are also possibilities of ferries to and from Mali Lošinj to Ancona, Venice or Trieste during summer season, please contact the following websites for information [www.jadrolinija.hr](http://www.jadrolinija.hr) or [www.sem.hr](http://www.sem.hr). There are also connections from Ancona, Civitanova and Venice, please check the following websites: <http://www.venezialines.com>, <http://www.snav.it>. In the summer season there may also be a catamaran running between Pula-Mali Lošinj-Zadar, check [www.lnp.hr](http://www.lnp.hr).

### By car

If you prefer to travel by car, you can drive to Brestova (close to Opatija) if coming from Italy/Slovenia directions or to Valbiska (Krk Island) if coming from Zagreb direction, where you can get a small ferry that will bring you on the island of Cres. Please contact us through email for the ferry schedules or check yourself on [www.jadrolinija.hr](http://www.jadrolinija.hr) under District of Rijeka.

### By train

There are trains from most of the major cities of continental Europe to Zagreb, Rijeka or Trieste. Please enquire at your departure point. The train station in Rijeka is 200m west of the bus station.

## **By plane**

There are cheap flights to Pula, Rijeka, Split, and Zagreb in Croatia, and Venice and Trieste in Italy. For timetables of flights you can check Croatia Airlines ([www.croatiaairlines.hr](http://www.croatiaairlines.hr)), Ryanair ([www.ryanair.com](http://www.ryanair.com)), GO ([www.go-fly.com](http://www.go-fly.com)), Wizz Air ([www.wizzair.com](http://www.wizzair.com)). There are also airlines flying from Germany, including [www.airberlin.com](http://www.airberlin.com) and [www.germanwings.com](http://www.germanwings.com). There is also a possibility of flights through Air Adriatic ([www.airadriatic.hr](http://www.airadriatic.hr)) or Hidden Croatia ([www.hiddencroatia.co.uk](http://www.hiddencroatia.co.uk)). There are also possibilities of other links through Ancona then by ferry, however timetables and prices change yearly please contact the relevant flight and websites for further information.