



**AQUARIUM PULA  
&  
MARINE EDUCATIONAL CENTRE PULA**

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## **„Blue school“ for groups outside Croatia**

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**Note:**

*Ticket prices are fixed until 1<sup>st</sup> June 2011, and will subsequently be subject to change.*

# 1. Aquarium exhibition and infrastructure description

The exhibition contains 80 fish species and 100 species of invertebrate organisms placed in 60 tanks with fresh or sea water with volumes from 200 to 40 000 litres. The north Adriatic flora and fauna is on display on the fort's ground floor. On the first floor the Sea Turtle Rescue Centre, the south Adriatic and Mediterranean flora and fauna, fresh- and salt-water tropical organisms and sea horses are exhibited while in the moat, which surrounds the fort, there are fish from European rivers and lakes and a shelter for red eared sliders. The aquarium also includes the exhibition "Evolution", the interactive exhibition "The Park of Physics" and the short educational movie "*Posidonia oceanica*". From the roof of the fort, a unique view of the entire city of Pula and Istria stretches to the distant horizon, while in the moat you can enjoy refreshments on our summer terrace.

With the help of professional guides, visitors are able to gain an insight into the distinctive features of organisms, their behaviour, relationships, as well as many other interesting facts about sea organisms and their habitats. If accompanied by a guide, it is also possible to touch starfish, sea cucumber, crab and uncover the fish which are hidden in the sandy bottom, as well as spot animals which are almost invisible due to their camouflage.

On the first floor of the fortress Verudela, there are two rooms of 45 m<sup>2</sup> that have been converted into chemical and biological laboratories with flowing seawater, and a capacity for approx. 30 students. Additionally, they are equipped with a projector, screen, school board and computer with the possibility of connection to the Internet. The laboratories are located near the toilets. For the purpose of lectures and films a room with approx. 50 seats and a big projection screen (dimensions 280 x 210 cm) is available. Field work is performed on the shore and from the boat, within 10 minutes' walk from the aquarium.

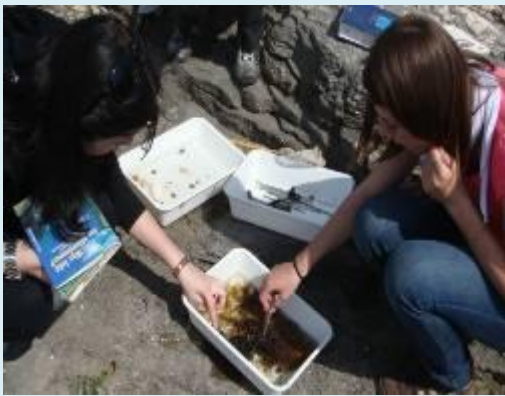


## 2. “Blue school” syllabus

### 2.1. FIELD WORK

It is only a ten minute walk from the aquarium to the quay, where the boat is berthed. Habitats are analysed on the beach (splash and intertidal zones) with the possibility of collecting samples by snorkelling in the sublittoral zone. The collected material is identified, descriptions are given for the species that are the most typical for the certain habitat, and their adaptations to such extreme ecological conditions are observed and explained.

The boat gives access to an area which is rich in biological diversity. The weather forecast, direction of wave movement, currents, and the wind are determined during the trip. Participants are introduced to the basics of fishing. Samples are collected by raising the fishing nets, or plankton nets, and/or by snorkelling. The organisms are then identified and analysed in terms of their biology.



### 2.2. BIOLOGICAL WORKSHOP

Subjects:

1. Seagrass community
2. The anatomy and physiology of invertebrate organisms
3. The anatomic and physiological comparison of cartilaginous and bony fish through dissection
4. Preparation and analysis of fish blood samples



### 2.3. CHEMICAL - PHYSICAL WORKSHOP

Subjects:

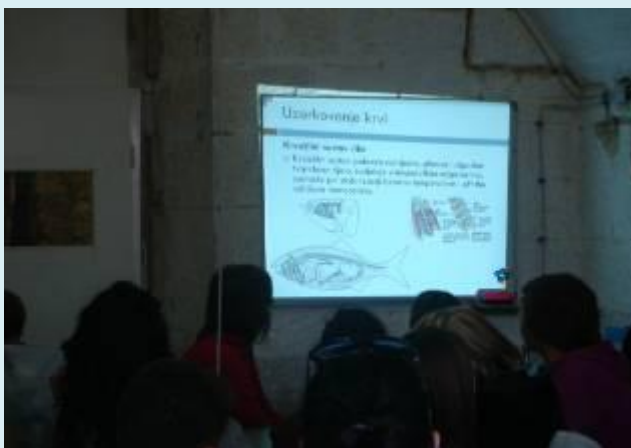
1. Introduction to marine chemistry - basic chemical parameters with characteristic diagrams and their determination in sea water; primary production in the sea



### 2.4. EXPERT LECTURES

Subjects:

1. Introduction to marine biology
2. Invertebrate organisms: taxonomy and adaptations
3. Fish and their adaptations
4. Ecotoxicology
5. Dangerous and poisonous sea animals
6. Human influence on processes and ecological relationships in the Adriatic Sea
7. Chemical defence in marine organisms



### 3. Ticket prices

TICKET PRICES
60 kn adults
40 kn school and college students, seniors (+60 yrs)
30 kn children ages 3 to 7

**Notes:**

1. Ticket prices include VAT.
2. Expert guidance is charged at the fee of 150,00 kn and is not included in the price above. If the expert guidance is performed on Sunday or national holidays, the ticket price increases by 30% (Sunday) or 50% (on holidays).

### 4. “Blue school” prices

AQUARIUM PROGRAMMES	CONTENT	DURATION	PRICE
<b>BLUE SCHOOL 1</b>	- ticket + guided tour of the aquarium - field work on the coast (optional snorkelling)	<b>2 hr 30 min</b>	<b>20,00 €</b>
<b>BLUE SCHOOL 2</b>	- ticket + guided tour of the aquarium - field work on the boat	<b>2 hr 30 min</b>	<b>25,00 €</b>
<b>BLUE SCHOOL 3</b>	- ticket + guided tour of the aquarium - biological workshop - physical-chemical workshop - field work on the coast (optional diving)	<b>3 hr 30 min</b>	<b>30,00 €</b>
<b>BLUE SCHOOL 4</b>	- ticket + guided tour of the aquarium - biological workshop - physical-chemical workshop - field work on the coast (optional diving) - field work on the boat	<b>4 hr 15 min</b>	<b>40,00 €</b>

**Notes:**

1. The price of the ticket or programme includes VAT, participant insurance and boarding on and off the boat.
2. Prices are displayed in Euros, and are charged in Kuna at the middle rate of the Croatian National Bank on the day of the service.
3. Group programmes are held independently of our work hours, from Monday to Saturday. If the programmes are performed on Sunday or national holidays, the price increases by 30% (Sunday) or 50% (on holidays).
4. All programmes can be attended in Croatian, English, German, or Italian.

# 5. Three-day aquarium programme

## **1<sup>st</sup> DAY Introduction to the marine ecological system (4-5h)**

- touring the aquarium with expert guide
- biological workshop (the division of marine environments with regards to plankton, food chains, and biotic factors followed by practical work; analysing the seagrass community and use of microscopes)
- physical and chemical workshops (introduction into the chemistry of the sea - basic chemical parameters with characteristic diagrams and their determination in sea water; primary production in the sea)

## **2<sup>nd</sup> DAY Field work on the boat and seashore (4-5h)**

- analysing the shore habitats (splash and intertidal zones) with the possibility of collecting samples by snorkelling in the sublittoral zone
- getting to know the basics of fishery; collecting samples by raising fishing nets and trawling plankton nets

## **3<sup>rd</sup> DAY Practical work in practicums (4-5h)**

- biological workshop (anatomy and physiology of vertebrate and invertebrate marine organisms, preparing and analysing fish blood samples)
- physical and chemical workshop (chemical defence in marine organisms, adaptations of sea organisms for the salt-water environment)

**Price: 30 € a day per person**

### **Notes:**

1. *You can request a detailed programme description via email (infos@aquarium.hr).*
2. *The boat's maximum capacity is 12 persons. The duration of field work will vary depending on the number of programme participants.*
3. *The schedule of programme events will depend on the weather.*

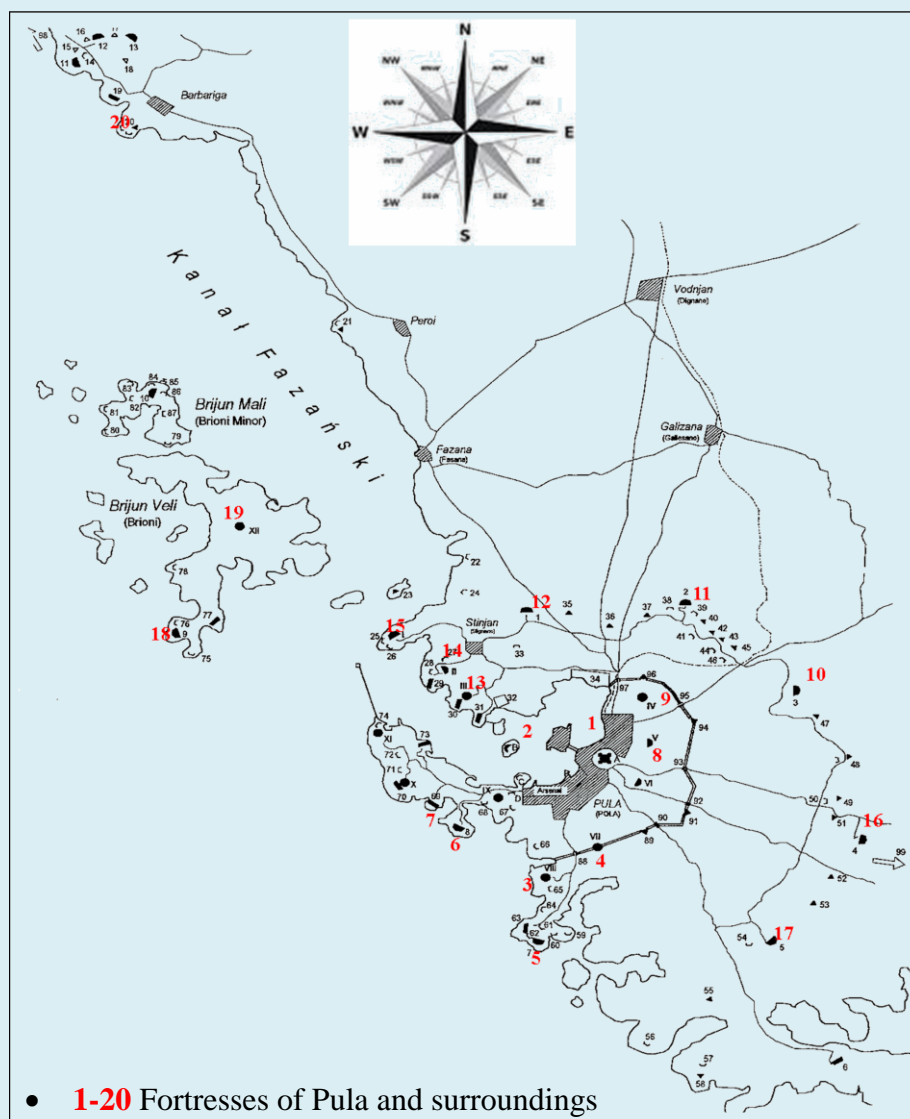
## 6. Austro-Hungarian fortifications tour

From the mid-19<sup>th</sup> century until the World War I, Pula, which lies on the Istrian peninsula, was the main base of the Austrian Navy. Until that time Pula was a small, malaria-infested locality on the coast of the Adriatic Sea. There was a citadel, built in 1639, a small fortification complex, built in the 1820s and 1830s and some naval auxiliary stores. Building of the fortresses was started in 1852. Of the three main fortification rings, the first was to protect the entrance to the naval harbour; the second extended around a wider area of the town; while the third extended outside the town. Fortresses outside Pula were also built to control access to the naval port and the Channel of Fažana between the Brijuni Islands and Barbariga.

The numerous preserved structures of the defence system, the ancillary military and naval facilities, infrastructure and utilities, as well as buildings for social and cultural events make this space a cultural landscape of exceptional value.

**The offer:** a guided tour of Austro-Hungarian fortresses in the town of Pula and surrounding area with your own transport.

**Price:** 150 kn per group per hour (approx. 20 €)



# 7. Reservations and helpful information

## OPENING HOURS

**April, May and September 10:00 - 18:00**

**June – August 09:00 - 22:00**

**October – March 10:00 -16:00**

*Closed: Dec. 25<sup>th</sup> and Jan. 1<sup>st</sup>*

### Note:

*Group programmes are held independently of our work hours, from Monday to Saturday. If the programmes are performed on Sunday or national holidays, the price increases by 30% (Sunday) or 50% (on holidays).*

## HOW TO MAKE A RESERVATION

**Phone:** 00385/52 381 402  
00385/52 381 403  
00385/91 1381 415  
**Fax:** 00385/52 381 404  
**e-mail:** [infos@aquarium.hr](mailto:infos@aquarium.hr)

In order to make a reservation it is necessary to prepare:

1. programme and subject names which are offered
2. time and date of arrival
3. payment mode
4. personal data i.e., e-mail address, phone and fax numbers.

## PAYMENT

Payments can be made in cash, by tender or receipt, to the giro account:

AQUARIUM PULA (Zagrebačka banka d.d. 2360000 – 1101162470)

### Note:

*If you are not paying in cash or if you require a R1 receipt, please, prepare the following information: name of legal subject or business, address and registration number.*

## HOW TO CANCEL A VISIT OR BOOKING

Please cancel the agreement and reservations as soon as possible via phone or e-mail.

## ACCOMPANIMENT

Preschool and school groups must be accompanied. Group guides are obliged to be responsible for their students during the tour of the aquarium, or during any of our programmes. Guides have free entrance into the aquarium.