



2016

# MURTER ECO PATROL

E-manual for non-formal  
environmental education





## **ARGONAUTA ASSOCIATION**

### **European Volunteer Service "Sea Is Life 5"**

#### **Workshops Authors**

Marieta Baričević  
Sergio Campins, EVS  
Vice Krnčević,  
Eva Lozano, EVS  
Małgorzata Serwatka, EVS  
Sanja Tabori

#### **Photography**

Sergio Campins, EVS  
Eva Lozano, EVS  
Małgorzata Serwatka, EVS

#### **Booklet design and edition**

Eva Lozano, EVS  
Małgorzata Serwatka, EVS

December 2016

This project is funded by ERASMUS+

This publication has been produced with the assistance of the ERASMUS+ Programme of the European Union. The contents of this publication are the sole responsibility of ARGONAUTA and can in no way be taken to reflect the views of the European Union.



Ministarstvo  
znanosti,  
obrazovanja  
i sporta

# TABLE OF CONTENTS

INTRODUCTION.....	1
-------------------	---

## 1 OUR NATURE

1. Sea herbarium.....	3
2. Charismatic Nature.....	5
3. Seashells of Adriatic Sea.....	7
4. Fossils.....	9
5. Bats.....	11

## 2 PATROLLING

6. Sea mammals monitoring.....	14
7. Sustainable fishery.....	15
8. Cleaning actions.....	17
9. Microplastics.....	19

## 3 TREASURE HUNT

10. Biodiversity.....	21
11. Sea Turtle Conservancy.....	24

## 4 EXPERIMENTS

12. Thermohaline circulation.....	27
13. Ocean Acidification.....	30
14. Sustainable energy.....	33

## 5 CAMPAIGNS

15. Change Climate Change.....	35
16. Dry Stone walls.....	37



## INTRODUCTION

Eco-patrol started in the framework of a project called “Kornati – it’s important to know about the sea” supported by Croatian Ministry of Education. Within this project for a number of years, we implemented the activities of “School in nature” in Kornati National Park, played Eco-puppet show for pre-school children and last year (2016), we include the activity of Eco-patrol.



Eco-patrol is created as an out-of-school activity targeted at students of primary school (age 10 to 14 in Croatia), with the goal of raising environmental awareness and love for the nature.

Methodology used in the implementation of Eco-patrol activities is driven from non-formal methods of learning by doing: team work, field work, experiments, educational trips, interactive presentations, actions and campaigns in the community, treasure hunt games, group dynamics, concentration and motivation games, etc.



Eco-patrol touches upon some topics from following disciplines: nature and society, ecology, (marine) biology, geography, chemistry, (local) history, but for the time being the themes of Eco-patrol do not follow any of existing school curriculums of the mentions subjects.

Eco-patrol program is created in teamwork within our organisation, where every member gives an input depending on his/her own education and professional experiences.



Large contribution and international character of the Eco-patrol activities is given by European Volunteer Service volunteers within EVS project Sea is Life. They actively participate in the creation, design and implementation of the Eco-patrol program giving their own vision.

Eco-patrol activities are implemented on Saturday mornings, lasting from 2 till 3 hours, taking place in Island's Sustainability Educational Center in Murter, and at various locations in Murter Island and other nearby places. From 10 to 20 children in age of 10 to 14 participates. Workshops are implemented by a facilitator with the help of two EVS volunteers. By now, we have implemented 2 sets of 10 different activities – spring and autumn set.



The purpose of this e-manual is to help anyone wishing to do similar activities in their local communities – no matter NGO, school or other organisation or individual. In this e-manual we have group the main activities, described in user friendly way in order for facilitator to get inspired and can easily and quickly prepare the chosen activity.



We hope this e-manual will be your inspiration!

Feel free to contact us at [mail@argonauta.hr](mailto:mail@argonauta.hr) for more details or with the feedback about how you used this e-manual.

# 1 OUR NATURE

**TOPIC** Sea Herbarium

**LOCATION** Indoor/Outdoor  
Beach

**TIME** 3 hours

## MATERIALS & EQUIPMENT

- at the beach: printed script with flora and fauna of the sea, buckets to collect the samples,
- flip chart, pictures of animals, glue, plastic boxes, freshwater, tights, papers, pencils, old newspapers

## GOALS

To get closer and familiar with nature around us and get a better understanding about the sea creatures that are living in shallow water, their habitats and their behaviour. To be able to recognize three main group of seaweeds.

To learn some basic scientific methods about species classification. To get in direct contact with animals and plants in their natural habitats to understand why is so important to protect the sea.

## SUMMARY

Littoral zone is the part of a sea, lake or river that is close to the shore. In coastal environments the littoral zone extends from the high water mark, which is rarely inundated, to shoreline areas that are permanently submerged. During the short

presentation, the tutor give a short introduction about littoral flora and fauna including pictures and names of the species, in our case, putting attention on the ones that you can find in Murter Island. The workshop take place outdoors, on the seashore. The first task is to work in pairs, observe nature and find all the species from the script. In group, to collect seaweeds in order to create the common Sea herbarium. At the end, to create a poster in which the different species observed are represented on their proper oceanic zone.

## USEFUL LINKS

video - How to make a sea herbarium?

[www.youtube.com/watch?v=7ox-uT4mVzU](https://www.youtube.com/watch?v=7ox-uT4mVzU)  
article

[www.insidemurter.wordpress.com/2016/05/11/shallow-sea-living-world-sea-herbarium/](https://www.insidemurter.wordpress.com/2016/05/11/shallow-sea-living-world-sea-herbarium/)





## ACTIVITIES

As an introduction, to talk about the three kind of littoral subregions and the seaweeds: green, brown and red algae follow by a discussion about their habitats and adaptation techniques.

### TASKS

#### I. Searching for...

Participants get a script with pictures and name of the animals and plants that they have to find around.

#### II. Make a sea herbarium

An herbarium is a collection of dried and pressed plants. Introduce participants the method about how to collect sea algae and how to prepare their own sea herbarium using basic scientists methods in simplified version. For transporting algae from the field, keep them under sea water in cold and dark container. To create an herbarium you need blotting paper or other thick absorbent paper. First create the layers using old newspaper and absorbent paper where you will put your sample. Write down the name of the species using a pencil, not pen. Laid seaweeds on the paper and make it as flat as possible. Cover it with a piece of tights and more newspaper and press it. To attached the specimens to the herbarium sheets place some heavy books on the top of them and leave it for around 2 days to dry.



#### III. Stick task

To create a representative poster about the three littoral subregions including a picture of each animal found, and stick them in their proper habitat.

# 1

# OUR NATURE

**TOPIC** Charismatic Nature

**LOCATION** Indoor/Outdoor  
National Park

**TIME** 3 hours

## MATERIALS & EQUIPMENT

- presentation
- laptop
- projector
- sheets of paper
- pens
- transport - a Van

## GOALS

To be introduced to Protected Areas Management, focusing in the ones in their country. To be able to identify different kinds of categories of protection of species, habitats and zones. To understand the importance of the protection of biodiversity and their habitats.

## SUMMARY

Nowadays the rate of species extinction has increased more than 100 times in the last 5 centuries and their natural habitats are decreasing faster than ever. Around the planet, a huge amount of animals, plants and their habitats are threatened. With millions of species of concern, categorize species status makes conservation decisions easier in the maintenance of as much biodiversity as possible. The International Union for Conservation of Nature (IUCN) create Red List,

which is an inventory that classifies all known species in the world depending on their conservation status: from lower risk to threatened or even extinct. Another tool is the identification of species as umbrella, keystone, flagship and indicator. These categories can be used in land use management to create Protected Areas. For a better understanding of the importance of the Protected Area the participants visited a National Park and had a discussion with Managers for the Area.

## USEFUL LINKS

presentation

[www.prezi.com/wfyritm0wf7o/?](http://www.prezi.com/wfyritm0wf7o/?)

[utm\\_campaign=share&utm\\_medium=copy&rc=ex0share](http://www.prezi.com/wfyritm0wf7o/?utm_campaign=share&utm_medium=copy&rc=ex0share)

article

[www.insidemurter.wordpress.com/2016/10/19/charismatic-nature/](http://www.insidemurter.wordpress.com/2016/10/19/charismatic-nature/)





## ACTIVITIES

In this workshop the participants are introduced to terms about Conservation with a presentation. Later on, they work in groups to create a poster, and altogether play a role game, "behaviour in a Protected Area". Make a short review of information understood. Explain what does it mean "threatened species", comparing for example, Mediterranean Area and Adriatic Sea and explain the concept of umbrella, keystone, flagship and indicator species. Go to National Park for a meeting managers and to have a walk around the park



## TASKS

### I. Write down...

Participants have around 2 minutes to write down Protected Areas (National Parks, Nature Parks, Natura 2000 sites, etc.) that they know that there are in Croatia.

### II. Work in group or pairs

Participants need to create a poster promoting one given threatened species to convince others groups to support their protection as if they were convincing the local community/politicians to create a protected area for this species. At the end, discuss how difficult was for them this task, why they think National Park are created.

### III. Role play

Role game topic "how to behave in National Parks". Discuss about what kinds of behaviour are allowed and not. The participants are divided in groups with different roles: RANGER, VISITOR, LOCAL PERSON, ANIMALS & TREES. Make 2 performances, first asking the visitors team to act like unrespectful tourist and the second one about how do they think it should work. Once the role game is finished, discuss in group the results and what did they learn.

# 1 OUR NATURE

**TOPIC** Seashells of Adriatic Sea

**LOCATION** Indoor/Outdoor  
Beach

**TIME** 2 hours

## GOALS

To learn the main principles of shell identification. To be able to easily difference the three main types of Mollusk: Gastropods, Bivalves, and Cephalopods. To get broad and detail information about Mollusk ecology such as their body structures, natural habitats, breathing systems and feeding habits.

## SUMMARY

Mollusca is one of the most diverse groups of animals on the planet, with at least 50,000 living species (and more likely around 200,000). It includes such familiar organisms as snails, octopuses, squid, clams, scallops, oysters, and chitons. Mollusks are a clade of organisms that all have soft bodies which typically have a

## MATERIALS & EQUIPMENT

- shells of Gastropods and Bivalves
- magnifying glass, form - where participants can write down their observation, pens
- computer, projector, box with sand, rocks and plants
- identification key books

"head" and a "foot" region. Often their bodies are covered by a hard exoskeleton, as in the shells of snails and clams or the plates of chitons. A part of almost every ecosystem in the world, molluscs are extremely important members of many ecological communities. At the beginning have a short presentation during which participants get to know better all three classes of Molluscs. The main exercise of the workshop is to classify and describe fifteen types of shells given.

## USEFUL LINKS

video

[www.shapeoflife.org/video/molluscs-survival-game](http://www.shapeoflife.org/video/molluscs-survival-game)

article

[www.insidemurter.wordpress.com/2016/11/23/seashells-of-the-adriatic-sea/](http://www.insidemurter.wordpress.com/2016/11/23/seashells-of-the-adriatic-sea/)





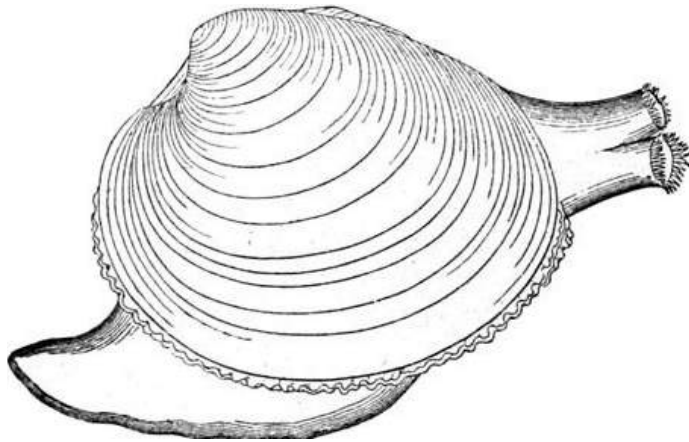
## ACTIVITIES

Prepare boxes with different substrate inside - it imitated sea bottom habitats where Gastropods and Bivalves live. Before participants come, hide all of the shells in their proper place (under or on the rocks, sand, mud, plants, or mix of all) depending on their habitat.

### TASKS

#### I. Looking at, describing and identifying objects

The task is to find all 15 kinds of shells and carefully observe them. Write down observation in the table (color, characteristic shape etc.) and measure the length of shells. Participants should pay attention on where they found shells. Using pictograms they mark in the table in which habitat each particular animal lived. For recognizing each single species, will be provide identification key books.



After this task, show to the group pictures and videos of the species living in their natural habitat for them to be able to connect it with the theory learned.

#### II. Create cards

Summarize the workshop. Each participant choose the shell they like the most and prepare a card with a drawing and a short description about this species.

#### Discussion questions

- Which of them you saw on the shore/in the sea?
- Why some of this shells are protected?
- How can the species be protected ?
- How can you participated in the protection of the species?



# OUR NATURE

**TOPIC** Fossils

**LOCATION** Outdoor

**TIME** 2 hours

## GOALS

To learn about fossils and its formation. To discover how the place where the participants live was created and understand the geological periods and its huge scale of time. To spend time in nature and develop creativity skills creating a fossil with clay.

## SUMMARY

A fossil is the naturally preserved remains or traces of animals or plants that lived in the geologic past. There are several processes that plants and animals or their parts can be preserved. No matter which way preservation occurs it takes a lot of luck, pure happenstance, depending environment conditions in the moment of death. The most common method of fossilization is called permineralization, or petrification. After an organism's soft tissues

## MATERIALS & EQUIPMENT

- fossils
- poster about the different geological periods
- some coins
- clay

decay in sediment, the hard parts, particularly the bones, are left behind. This outdoors workshop started with a presentation about the geological formation of the Adriatic sea and the island, information about fossils and how they are created as well. Later on, participants spent time around nature altogether looking for fossils, shells and other materials to make their own fossil with clay on the top of the hill. In between the activities there were various energizers and games.

## USEFUL LINKS

presentation

[www.prezi.com/wfyritm0wf7o/?](http://www.prezi.com/wfyritm0wf7o/?)

utm\_campaign=share&utm\_medium=copy&rc=ex0share

article

[www.insidemurter.wordpress.com/2016/10/19/charismatic-nature/](http://www.insidemurter.wordpress.com/2016/10/19/charismatic-nature/)



## ACTIVITIES

### TASKS

Start with a brief introduction to Earth Eras, when and how the Adriatic and Murter Island were created, what is a fossil and which kinds can be found in the island.

#### **I. Work in group or pairs**

In group, go for a walk and search for the materials: fossils, shells, rocks, plants and flowers...

#### **II. Analyze and identify some fossils**

Review in group the material collected, identify the fossils helped by an Identification guide

#### **III. Scratch test**

Scratch test to check hardness of rock. Scratch the different rocks found help by a coin, nail, other rocks, etc. And create a scale from the softest to the hardest.

#### **IV. Make own fossil**

Each of the participants receives a board of cardboard in which they can knead and give the desired shape to the clay. Distribute all the materials found where everybody can access to them to create their own fossil footprint.



1

# OUR NATURE HALLOWEEN WORKSHOP

**TOPIC** Bats

**LOCATION** Indoor

**TIME** 2 hours

## MATERIALS & EQUIPMENT

- computer, projector,
- pencils, glue, scissors
- decoration: paper bats, candle, mandarins, snacks

## GOALS

To give an integrated understanding of the biology of bats. To learn about the habitat, anatomy and behaviour, as well as the threats and conservation status of the only flying mammals. Experiment what echolocation means. Finally, to understand the important role of these animals for humans and for the environment as pollinators.

## SUMMARY

Bats are the only group of mammals that can fly and they use echolocation to navigate and hunt at night. The vast majority of bats eat insects, including many pest species, but are also important pollinators and seed dispersers. Bats are the only group of mammals that can fly and they use echolocation to navigate and hunt at night.

As major insect-controllers and pollinators, bats are important for ecosystem health and hugely beneficial to humans. Sadly, many bats are under severe threat from increasing human pressure. Habitat loss, climate change, deforestation, disturbance and persecution are causes of bats declining globally. Bats are part of a global ecosystem, and right now it's important to focus on their conservation for their continuity on it. Most of this information is included in the video. After the projection and a short discussion participants have 4 tasks to solve.

## USEFUL LINKS

video

[www.youtube.com/watch?v=HY0ThceHOel&t=302s](https://www.youtube.com/watch?v=HY0ThceHOel&t=302s)

article

[www.insidemurter.wordpress.com/2016/11/02/halloween-bats/](http://www.insidemurter.wordpress.com/2016/11/02/halloween-bats/)










## ACTIVITIES

### DESCRIPTIONS OF ECHOLOCATION GAME

Ask all participants to stand in circle. Ask for two volunteers. One volunteer will be the BAT and another the MOT and they both go in the center of the circle and wear a blindfold . The participants that remain standing in the circle are the trees, and must be on silence. The bat tries to catch the moth. The bat claps once to represent the echolocation sound being emitted. The moth must clap twice to show the sound has bounce off the moth. The bat must track down the moth by walking around the circle trying to touch the moth. The moth must try and evade capture. The trees keep the bat and moth contained by holding their arms out to prevent escaping the circle. The round is over once the moth is touched. Second option is: Both the bat and the moth must remain on their hands and knees. Everyone in the circle must be quiet.. If the bat calls out "bat", the moth must answer "moth." If the bat gets close to the edge of the circle and bumps into the trees the trees can say "trees." When the moth is touched by the bat, the round is over. You can play for several rounds to give all of the children a chance to be in the middle of the circle.


### TASKS

#### I. Quiz







<p><b>1. What do bats eat?</b></p> <p>A. fruit, plants</p> <p><u>B. fruits, insects</u></p> <p>C. mouse, insects</p>		<p><b>2. Where do bats live?</b></p> <p><u>A. forest, water, meadows, scrub</u></p> <p>B. deserts, palm trees, cave, forest</p> <p>C. house, meadows, scrub, forest</p>
<p><b>3. How much bats weight?</b></p> <p>A. 4-44 g</p> <p><u>B. 4-45 g</u></p> <p>C. 1- 12 g</p>		<p><b>4. What happen with their body temperature during hibernation processes?</b></p> <p>A. temperature rise</p> <p>B. temperature fall down</p> <p>C. Nothing happen</p> 
<p><b>5. How many species of bats are living in the Balkans?</b></p> <p>A. 36</p> <p>B. 41</p> <p><u>C. 30</u></p>		<p><b>6. Which animals use echolocation?</b></p> <p>A. sharks and bats</p> <p><u>B. bats and dolphins</u></p> <p>C. dolphins and shark</p> 

## II. Match task

Works in pair to stick sentences in the right place in the table.

IMPORTANCE OF BATS	TREATS TO BATS 
<ul style="list-style-type: none"><li>CONTROL NUMBER OF INSECTS</li><li>BENEFICIAL TO FOREST AND AGRICULTURE</li><li>POLLINATION OF FLOWERS AND SPREAD THEIR SEEDS</li></ul>	<ul style="list-style-type: none"><li>DISTURB DURING HIBERNATION</li><li>DISTURB DURING BREEDING SEASON (SITUATION WHEN YOUNG FALL DOWN BEFORE THEY KNOW HOW TO FLY)</li><li>HUMAN PRESSURE</li></ul>

### III. True or False game

Sentences	TRUE	FALSE
BATS EAT BLOOD		
BATS ARE BLIND		
BATS ARE DEFT		
BATS ARE ABLE TO FLY IN THE DARKNESS		
MEGABATS AND MICROBATS EAT THE SAME FOOD		
BATS CAN CATCH INSECTS FLYING		

## IV. Open questions

## WHERE AND WHY BATS TRAVEL IN AUTUMN?

## WHAT DOES IT MEAN "HIBERNATION"?



# 2

# PATROLLING

**TOPIC** Sea mammals monitoring

**LOCATION** Outdoor

**TIME** 2-3 hours

## GOALS

To have the opportunity to watch wild bottlenose dolphins in natural environment. To experience how researchers collect data about sea mammals. To know behaviour rules during sea monitoring. To understand the importance of dolphin and other sea mammals conservation.

## SUMMARY

Monitoring from a boat to experience something different and at the same time learn a little bit more about the sea and the dolphins in their natural habitat. The lectures about the dolphins, the behavior on boat and around the dolphins precedes the trip to the sea. When you notice dolphins do not approach head on or from behind! Approche slowly form thier side. Avoid sudden chainges of spped on direction. Give them space. Do not come closer than 50 m. Let them decide to approach you.

## MATERIALS & EQUIPMENT

- computer, projector, presentation
- boat, life jackets
- Smartphone App "Marine Partnership"
- binoculars, camera

Marine Partnership is a smartphone application which contains information about the marine protected areas and species. The app enables to report a sighting on the spot, add photos and location of sea mammals. These data are usually collected and analyzed by scientists through research and monitoring programs. Reported your observations and in this way complement the scientists and conservationists efforts in creating a broad and detailed image of the state of the biodiversity and habitats.

## USEFUL LINKS

presentation

[www.prezi.com/8prko5dixzoy/?](http://www.prezi.com/8prko5dixzoy/?utm_campaign=share&utm_medium=copy&rc=ex0share)

[utm\\_campaign=share&utm\\_medium=copy&rc=ex0share](http://www.prezi.com/8prko5dixzoy/?utm_campaign=share&utm_medium=copy&rc=ex0share)

article

[www.insidemurter.wordpress.com/2016/05/31/species-monitoring-searching-for-dolphins/](http://www.insidemurter.wordpress.com/2016/05/31/species-monitoring-searching-for-dolphins/)



# 2

# PATROLLING

**TOPIC** Sustainable fishing

**LOCATION** Outdoor/Indoor

**TIME** 3 hours

## MATERIALS & EQUIPMENT

- computer, projector, presentation
- questionnaire, pens
- glue, big sheet of paper, old newspapers
- scissors

## GOALS

To discover fishermen profession and fishing methods used by local fishermen. To learn about different concepts like catch limits, aquaculture, overfishing, bycatching etc. To be able to discuss about current fishing problems such as a the overexploitation of resources and their possible solutions and current alternatives, that is to say, sustainable fishing.

## SUMMARY

Fishing is an important global industry. It provides a vital source of employment and a valuable natural food resource for people all around the world. Demand for seafood and advances in technology have led to fishing practices that are depleting fish and shellfish populations around the world. Fishers remove more than 77 billion kilograms of wildlife from the sea each year. Scientists fear that continuing to fish at this rate may soon result in a collapse of the world's fisheries. In order to continue relying on the ocean as an important food source, economists and conservationists say we will

need to employ sustainable fishing practices. It's essential to recognise the negative impacts of fishing and support fishers who are fishing responsibly, guaranteeing there will be populations of ocean and freshwater wildlife for the future. This workshop includes a presentation about sustainable fishing and seafood, different kinds of fishing nets and fishing practices. The main activity it is to interview local fisherman. Participants have to prepare questionnaire about fisherman's profession. During presentation and exercises participants get knowledge about equipment using to catch the fishes, focusing the attention on the overfishing problem.

## USEFUL LINKS

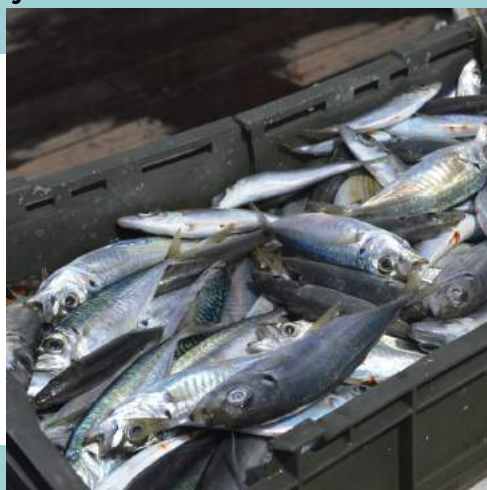
presentation

[http://prezi.com/rbzwk6iz7xfw/?](http://prezi.com/rbzwk6iz7xfw/?utm_campaign=share&utm_medium=copy&rc=ex0share)

utm\_campaign=share&utm\_medium=copy&rc=ex0share

article

<http://www.argonauta.hr/en/2863/murter-eco-patrol-and-sustainable-fishing/>





## ACTIVITIES

During the presentation try to answer together with participants on questions below:

- What is overfishing?
- What is a bycatch?
- How fishing influence habitat destruction?
- What are possible solutions to the overfishing problem? (sustainable fishing, closed season)
- Do you know what are commercial species of the fish and seafood in Adriatic Sea?

## TASKS

### I. Match task

Match pictures of different methods of fishing which are used to catch different sea creatures like: prawns, cod, herring etc.

### II. Collage/poster

At the end of workshop, participants are asked to answer “What is sustainable fishing?” with creating a poster with basic information about it.



### III. Interview local fisherman

Each participant has to write 2 question for fishermen. Then, the whole group decides which questions will be included in a questionnaire about fishermen profession. After creating the questionnaire, the participants are asked to go out and interview fishermen.

# 2

# PATROLLING

**TOPIC** Cleaning actions

**LOCATION** Outdoor

**TIME** 2-3 hours

## MATERIALS & EQUIPMENT

- plastic bags
- single use gloves
- phone with GPS
- make a sign: wood board, watercolour

## GOALS

To patrol the island searching for illegal dumping and clean up the seashore. To see the effect of plastic pollution and where it end up our waste when is not manage in the right way. To learn about the concept of microplastics. To be aware of the importance of not trashing nature. To get knowledge about situation on the island and feel that is possible to make a difference. To write a letter informing the municipality about illegal dumping location.

## SUMMARY

Illegal dumping is typically distinguished from littering by the type and amount of material and the way in which it is discarded. An example of littering could be throwing a cigarette on the ground. However, emptying a rubbish bin with no permission in a public or private area can be

These workshops are based in patrol, map and clean our community and its coastline. On the way to the seashore participants search and collect trash during the activity. Meanwhile participants see how plastic waste fall apart into tiny elements really difficult to collect called microplastics. They see how microplastics affecting the sea and seashore. Using GPS position participants mark spots to create the maps localizing where is the illegal dumping.

## USEFUL LINKS

articles

[www.insidemurter.wordpress.com/2016/03/09/patrolling-mapping-cleaning-action/](http://www.insidemurter.wordpress.com/2016/03/09/patrolling-mapping-cleaning-action/)

[www.insidemurter.wordpress.com/2016/03/17/collected-garbage-on-the-zminjak-island/](http://www.insidemurter.wordpress.com/2016/03/17/collected-garbage-on-the-zminjak-island/)

<https://insidemurter.wordpress.com/2016/04/29/zele-na-cistka-plava-cistka/>



## ACTIVITIES

At the beginning, discuss with the participants about illegal dumping problem around the world and how is the situation in the neighborhood. This action could be organize in a village, town, city, on the beach, in the park or in the forest. Your action could be connected with another international action or national one. In this case in Croatia is called Zelena čistka.



## TASKS

### I. Make a sign

Make a sign "This is not a landfill!" using wood board and watercolour.

### II. Cleaning action

Walk out to collect garbage during action mapping the position of illegal dumping.

### III. Create a map

Create a map with illegal dumping using the GPS data and attached it to letter "Murter clean services"

### IV. Write letter

After this activity, participants send the letter to "clean services" to inform them about the illegal dumping locations in order to them to fully clean it . Particularly, the heaviest garbage like wheels, chairs or big bags and finally ask information about the recycling program on the island. This is a good way for participants to see how their actions have a direct effect and encourage them to have a active role in society.

# 2

# PATROLLING

**TOPIC** Microplastics

**LOCATION** Outdoor/Indoor

**TIME** 1 hours + 1 week photo contest

## GOALS

To learn about the role of microplastic in environment and about the damages they cause. To understand what is Great Pacific Garbage Patch, how it was created and its dynamic.

To became aware of the quantity of plastics we use in our daily life and discuss in common about alternatives to reduce them.

## SUMMARY

Microplastic are small plastic particles in the environment that are generally smaller than 1 mm down to the micrometre range. They can come from a variety of sources, including cosmetics, clothing, and industrial processes. Two classifications of microplastics currently exist: primary microplastics are manufactured as a direct result of human material and product use, and secondary microplastics are

## MATERIALS & EQUIPMENT

- computer, projector,
- phone or camera, cable to connect phone-laptop to pass photos

microscopic plastic fragments derived from the breakdown of larger plastic debris like the macroscopic parts that make up the bulk of the Great Pacific Garbage Patch. Both types are recognized to persist in the environment at high levels, particularly in aquatic and marine ecosystems. Because plastics do not break down for many years, they can be ingested and incorporated into and accumulated in the bodies and tissues of many organisms. The entire cycle and movement of microplastics in the environment is not yet known, but research is currently underway to investigate this issue.

## USEFUL LINKS

presentation

[www.prezi.com/dophlstdc49b7/?](http://www.prezi.com/dophlstdc49b7/?utm_campaign=share&utm_medium=copy&rc=ex0share)

[utm\\_campaign=share&utm\\_medium=copy&rc=ex0share](http://www.prezi.com/dophlstdc49b7/?utm_campaign=share&utm_medium=copy&rc=ex0share)





ACTIVITIES

The presentation include an introduction of the topic, how plastic waste in the ocean threat sea animals a description of Great Pacific Garbage Patch and deeper knowledge about what is microplastic and how is created. Later on, there was a discussion about possible solutions for the problem in which, among others, the “Rule of 3 R: Reduce, Reuse, Recycling” was reviewed. This activity is connected with a Cleaning action on the seaside where participants could see on the field how plastics fall apart into a huge amount of tiny elements really difficult to collect.

TASKS

To get a better image of the problem, participants take part in a Photo Contest. During one week they will take a pictures of each plastic garbage that they produce. After one week participants will have the idea how much plastic do they use . Final discussion about how to reduce this amount.



# 3

# TREASURE HUNT

**TOPIC** Biodiversity

**LOCATION** Outdoor, hill

**TIME** 1 hour

## MATERIALS & EQUIPMENT

- presentation, projector, laptop
- printed tasks
- glue pens
- compass
- colored ribbons

## GOALS

To learn about the structure and levels of food chain in both marine and land ecosystems of the island: plankton, nekton, benthos, herbivores, omnivores, and carnivores. To know the role that each of them have in the system, where everything is connected.

## SUMMARY OF THE WORKSHOP

A food chain describes how energy and nutrients move through an ecosystem. Plants produce the energy, then it moves up to higher-level organisms like herbivores. After that when carnivores eat the herbivores, energy is transferred from one to the other. Treasure hunt game is a great opportunity to check it on the field.

Before you start game divide the members in two groups: red and blue. Teams start at the bottom of the hill from different location. Treasure is hidden at the top of the hill. The Participants have to work as a team to solve tasks related to biodiversity topic. We use non-formal education method like secret code, match pictures, work in pairs to scratch the words. As a reward the members got bags with organic motifs. At the end of the workshop we play energizer game called "Toaster, elephant & James Bond."

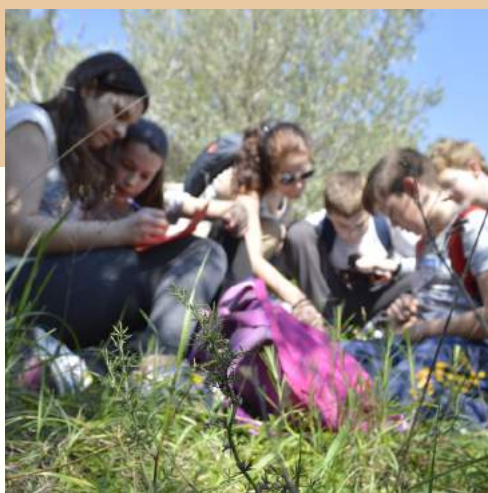
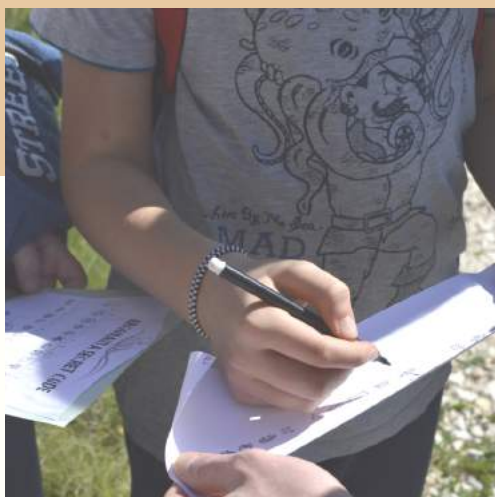
## USEFUL LINKS

presentation

[www.prezi.com/nzld6m3bhyas/copy-of-bioraznolikost/](http://www.prezi.com/nzld6m3bhyas/copy-of-bioraznolikost/)

utm\_campaign=share&utm\_medium=copy  
article

[www.insidemurter.wordpress.com/2016/03/23/biodiversity-of-murter-island/](http://www.insidemurter.wordpress.com/2016/03/23/biodiversity-of-murter-island/)





## TREASURE HUNT RULES

- Two team will start in the same time but in the different point.They have a similar path to get on top of the hill !
- During this path participants have to find 3 envelopes with letters and tasks.
- Participants working as a team, it's mean than they can start going to the next checkpoint only when the whole group is ready to go!

## ACTIVITIES

### I. Secret code

Participants have to find a secret code hidden near to them. After they decode one of the direction of the world (North, South, East, West). Using compass they find direction and follow it.



Example:

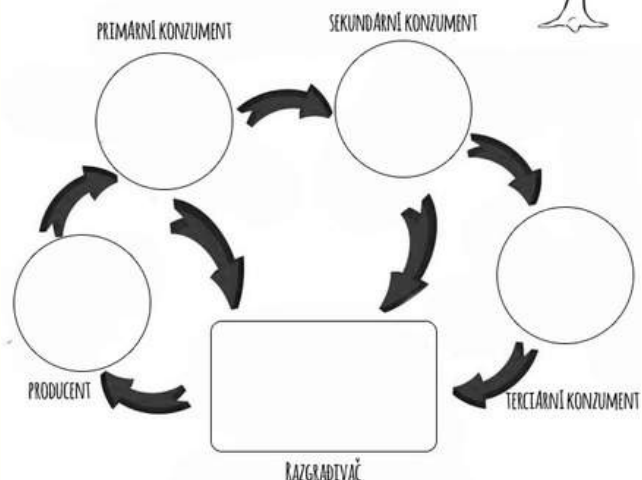
1. Dear team!  
Your task is decode message below to know in which direction you should go! First you need to find a secret code which is hide next to the nearest olive tree or biggest rock... After decode the message use a compass to find a right direction.

### II. Create food chain

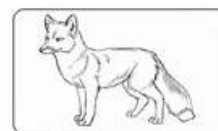
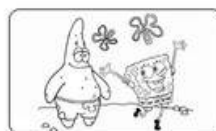
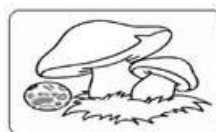
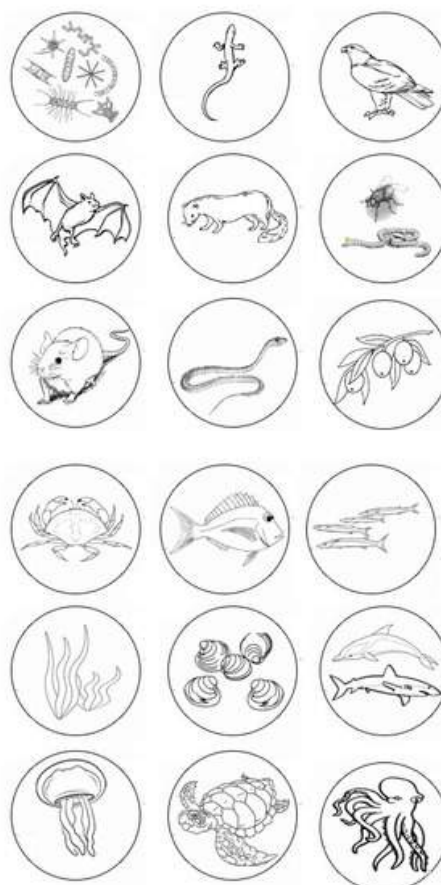
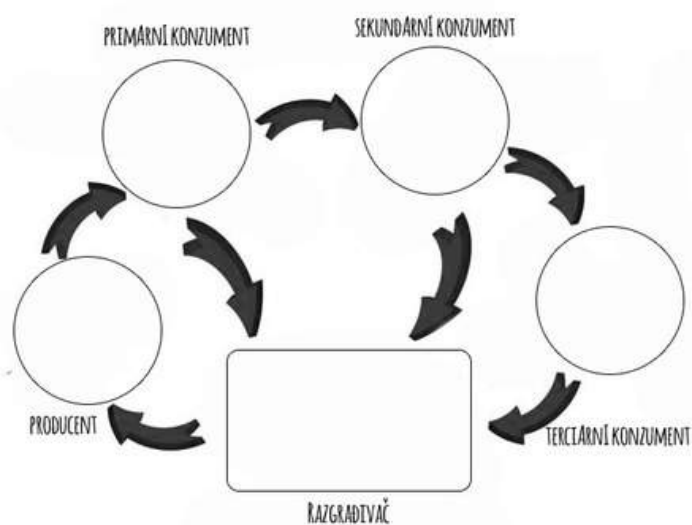
Participants have to create 2 food chains using pictures which they find in envelop. Using glue they stick animals in right place on the paper

- a) from land
- b) from sea

## H RANIDBENI LANAC

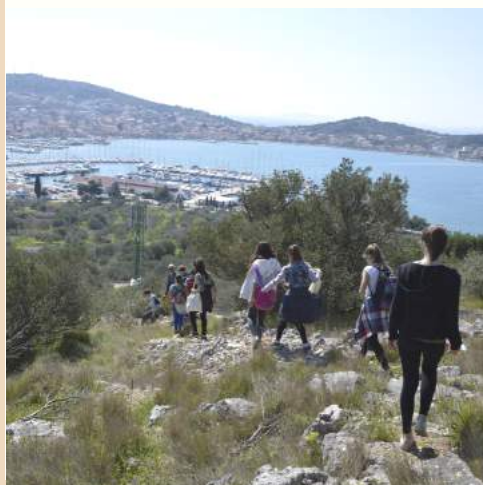


## H RANIDBENI LANAC



### III. Word Search

The Participants have to work in pairs, one paper for each couple. Using markers they highlight words



# 3

# TREASURE HUNT

**TOPIC** Sea Turtle Conservancy

**LOCATION** Outdoor, hills and seaside

**TIME** 2 hours

## MATERIALS & EQUIPMENT

- Prezi presentation, projector, laptop,
- map, envelopes, tasks, letter,
- scissors, markers, glue, shovel,
- mobile GPS, chocolate eggs

## GOALS

To introduce participants basic information about Loggerhead turtle. General information about reproduction process, migration path and ways how people protect this species around the world.

## SUMMARY

Before game start make a presentation about reproduction, migration and protection of sea turtles. After introduction go with participants up to hill where they get letter with all explanation. Group read story about one turtle which was lay eggs on the wrong coast. Main task for team is find this nest! At the end of the letter is code message where

participants have to go to find the treasure map. Eco patrol have to solve all the task as a team work. Participant use their orientation skills working with map. They use the knowledge which they get during presentation to solve multiplied task: match sentence and pictures, solve riddles, answer for question, make a sculpture and a little bit of geocaching.

## USEFUL LINKS

presentation

[www.prezi.com/nuexcbwo3f\\_g/copy-of-glavata-zelva/?utm\\_campaign=share&utm\\_medium=copy](http://www.prezi.com/nuexcbwo3f_g/copy-of-glavata-zelva/?utm_campaign=share&utm_medium=copy)

article

[www.insidemurter.wordpress.com/2016/04/05/sea-turtle-conservancy/](http://www.insidemurter.wordpress.com/2016/04/05/sea-turtle-conservancy/)





## ACTIVITIES

### MAP

On the map should be marked all checkpoints, treasure and also place when participants need look around to find each of 3 turtles left during the path.



### PLAN

Game start on the top of the hill where the participants find a letter with introduction (the story about lost turtles which was lay eggs on the wrong coast - the main goal of the game is find this nest. In the letter is direction to the next checkpoint where participants will find a map - this information is written used secret code. On the way participants will find a map.

### TASKS

#### I. Make a sculpture

Create sea turtles sculpture using only materials from surroundings

#### II. Match task

stick in roght place in the table prepared sentence importance and threats of sea turtles

#### III. Solve 3 riddles

Get key words related with the topic, do you know know thier meaning?

#### IV. Quiz

Five questions realted with the information from presentation. Choose 1 correct answer.

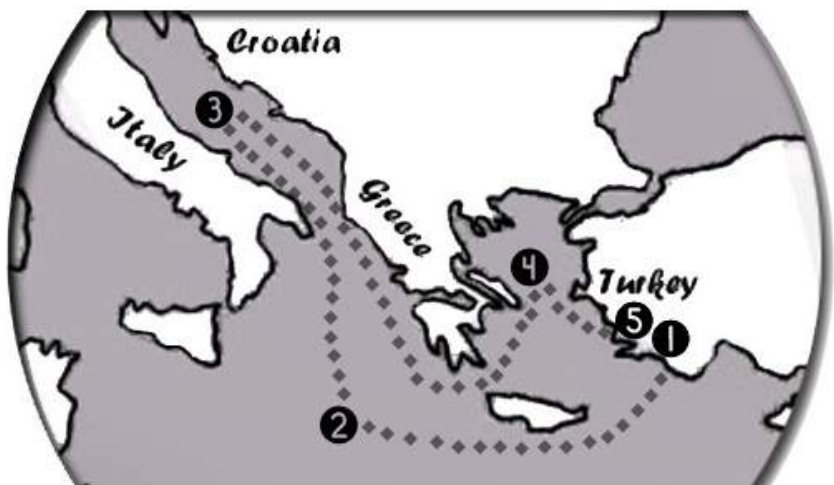
**V. Life cycle and migration  
around Mediterranean Sea**

stick pictures in right place on the  
map (hatching from an egg, growing  
up, feeding, breeding, egg laying).

**EXTRA TASKS**

During way participants need to find:

- a shovel which is mark on the map
- 3 turtles hide in surroundings on  
their armor is written GPS  
coordinates where treasure is  
hidden.



This time treasure is the nest of sea turtles and we hide under the sand  
chocolate eggs.



# 4

# EXPERIMENTS

**TOPIC** Thermohaline circulation

**LOCATION** Indoor

**TIME** 2 hours

## MATERIALS & EQUIPMENT

- presentation, projector, laptop
- pencils, paper form to write down observations
- experiment items are described below

## GOALS

To discover the concept of thermohaline circulation and the all the process involved on it. To understand the two main factors that control it, temperature and salinity gradients which drives the water's density. To learn about the importance of climate and temperature on Earth and how can Climate Change affect it.

## SUMMARY

Thermohaline circulation (Thermo= temperature Haline= salinity) is the component of general oceanic circulation controlled by horizontal differences in temperature and salinity. It continually replaces seawater at depth with water from the surface and slowly replaces surface water elsewhere with water rising from deeper depths.

Although this process is relatively slow, tremendous volumes of water are moved, which transport heat and important nutrients vast distances along the globe. Thermohaline circulation is a vital process that has a global effect controlling the climate of the Earth, without it the life on Earth won't be possible as we know it. This process is easier to visualize by understanding the mechanism of density of water with some simple experiments about this property, salinity and temperature.

## USEFUL LINKS

video

[www.youtube.com/watch?v=UuGrBhK2c7U](https://www.youtube.com/watch?v=UuGrBhK2c7U)

article

[www.argonauta.hr/3306/eko-patrola-istrazuje-termohalinsku-cirkulaciju/](http://www.argonauta.hr/3306/eko-patrola-istrazuje-termohalinsku-cirkulaciju/)





## EXPERIMENTS

### I. Water Temperature

#### MATERIALS & EQUIPMENT

- transparent tank with room temperature water
- 2 plastic cups
- cold water
- hot water
- water colorant
- 2 pins.

Molecules move faster when it is hot and slower when it is cold but, how we can see it? This simple experiment was a great way to show how the temperature changes the way the molecules of water behave.



For this experiment it is necessary a transparent tank and two non-transparent plastic cups. Make a hole at the bottom of cups using pin which should stay there, at the same distance from bottom in both cups. Fulfill the tank with room temperature water, the level of water must be lowest than in level of water in cups but half the high of the cups. Fill the first plastic cup with cold water and add blue colorant. Fill the second cup with warm water and add red colorant. After that, introduce both cups inside to the tank and take off the pins carefully. Now is time to observe: warm water (red) goes up and cold water (blue) stay at the bottom of tank. In this way, water is divided by layers. This is possible because molecules in the hot water move faster and are less dense than the molecules in the cold water.

## II. Effect of salt in density

### MATERIALS & EQUIPMENT

- 2 eggs
- 2 glasses or jars
- salt
- tap water
- spoons

Check within participants if eggs float or sink in water with different amount of salt on it. Take two transparent glasses with room temperature water. Add a big amount of salt in one glass. Put one egg in each glass. The egg float in the salty water but sink in the glass with water without salt. Why? The answer is density! As the salt dissolves in the water, it adds mass (more weight to the water). This makes the water to have higher density and thus allows the objects to float on the surface.

## III. What is density?

### MATERIALS & EQUIPMENT

- pipette
- test tube
- tap water
- salty water
- water colorants
- honey
- liquid soap
- sunflower oil
- sunscreen oil

Visual and entertaining experiment. Each participant used pipette to fill the test tube with liquids of different density. Each liquid create a layer due to this differences in density. Elements with higher density go to the bottom (i.e. honey) meanwhile elements with lower density elements (i.e. water) stay in the upper layers.



# 4

# EXPERIMENTS

**TOPIC** Ocean Acidification

**LOCATION** Indoor

**TIME** 2 hours

## GOALS

To learn about the concept of acidification, experiment with acid and basic, to illustrate how combustion of fossil fuels causes ocean acidification with its consequences for the marine life and how human activities and climate change affect the ocean.

## SUMMARY

When carbon dioxide (CO<sub>2</sub>) is absorbed by seawater, chemical reactions occur that reduce seawater pH, carbonate ion concentration and saturation states of biologically important calcium carbonate minerals. These chemical reactions are termed ocean acidification. Ocean acidification is expected to impact ocean species to varying degrees. Photosynthetic algae and seagrasses may benefit from higher CO<sub>2</sub> conditions in the ocean, as they require CO<sub>2</sub> to live just like plants on land. On the other hand, studies have shown that a more acidic environment has a dramatic effect on some

## MATERIALS & EQUIPMENT

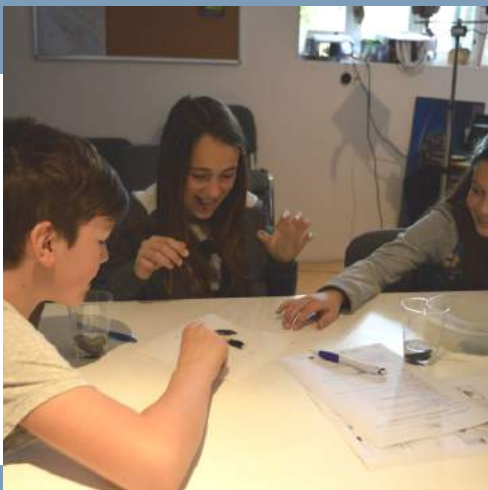
- presentation, projector, laptop
- tap and distilled water, spoons, white chalkboard, white vinegar, pH test strips, bromothymol blue (pH indicator), straws, baking soda, transparent cups, shells

calcifying species, including oysters, clams, sea urchins, shallow water corals, deep sea corals, and calcareous plankton. When shelled is supersaturated with respect to calcium carbonate minerals. This means there are abundant building blocks for calcifying organisms to build their skeletons and shells.

It is easier to understand theory when you see the example in person. We explain what is the pH scale, basic, acid and neutral solution and what happened in the ocean when the environment becomes more acid.

## USEFUL LINKS

presentation  
[www.prezi.com/2tsksjkmsvIm/ciclo-delcarbono/?utm\\_campaign=share&utm\\_medium=copy](http://www.prezi.com/2tsksjkmsvIm/ciclo-delcarbono/?utm_campaign=share&utm_medium=copy)  
 article  
[www.insidemurter.wordpress.com/2016/04/11/how-prepare-interesting-workshop-for-children-about-ocean-acidification/](http://www.insidemurter.wordpress.com/2016/04/11/how-prepare-interesting-workshop-for-children-about-ocean-acidification/)





## EXPERIMENTS

Acids and bases are terms that refer to how different elements, compounds, or solutions interact with each other. Water can be used to distinguish an acid from a base. A water molecule consists of one hydrogen atom and two oxygen atoms. Imagine adding a chemically reactive substance to water. Upon contact, the molecules of the substance break the bonds of water molecules, causing the water molecules to lose a hydrogen ion. When this occurs, the substance is considered an acid. Now imagine adding a different substance to the water. In this case, the water molecules lose a hydrogen atom and an oxygen atom. The liberated oxygen and hydrogen atom bond to form a hydroxide ion. In this case the substance added to the water is considered a base because it created hydroxide.

### I. pH scale

#### MATERIALS & EQUIPMENT

- bromothymol blue (pH indicator)
- distilled water
- straw
- vinegar
- baking soda,

Prepare 3 cups with a small amount of pH indicator and fulfill it with distilled water. The color will be change from blue to green- neutral pH. Next put at the table cups with bromothymol blue for each and participants can fill this cups also with distilled water. Now present a pH scale add vinegar to first cup- acid - color change for yellow, baking soda to the next one- basic-color change for dark blue. Leave in the middle neutral cup (green color). Now ask group, what will happen when they put inside their cups CO<sub>2</sub>? will the color change? Give participants straws, they'll have to take a depth breath of air and using straw blow CO<sub>2</sub> into the cup. Discuss the results.

### II. Chalk in an acid solution

#### MATERIALS & EQUIPMENT

- clean cups
- tap water
- spoon
- 2 pieces of chalkboard white not colored chalk,
- white vinegar
- pH test strips

Work in pairs, two cups for each pair. Sign the cups 1. water / 2.vinegar. Fullfill cups with the liquids. Using a pH test strips check a pH in cups. When all pairs are ready give them two pieces of chalks. Discuss with them what will happened if they put chalk to the water or to vinegar. Then try! In a cup with water nothing happen but in other cup with vinegar you will observe a lot of bubbles. Now explain what happen with that chalk and why.

**III. Dissolution of seashell**  
**MATERIALS & EQUIPMENT**

- clean cups
- tap water
- spoon
- white vinegar
- shells



Use the cups with water from previous experiment. Using a spoon put the chalk from this cup to the cup with vinegar. Give participants other clean cups where they need put vinegar and sign cup with name of their pairs (for example: first letters of their names). The pH scale of water and vinegar are known from the previous experiments. Give participants two shells. Ask them what they think, what will happen when they put shells into vinegar?

Seashells are made of calcium carbonate. The Mollusk is a class of invertebrates such as snails, squid, octopus, and clams. Calcium carbonate is considered a base. On the other hand, vinegar is acidic. When an acid and base come into contact, a chemical reaction occurs. In the case of the sea shell, the acidic vinegar breaks down the calcium carbonate, dissolving the sea shell.

This experiment needs more time to observe results. It shows more about the current situation in the ocean. Participants put the shell inside two cups and observe effect. At first nothing change. Show them the same shells which were in vinegar during last week. These shells are really soft and we can crush them easily. Explain how pH change the structures of shells. In the next workshop participants can observe results of their own experiment.



# 4

# EXPERIMENTS

**TOPIC** Sustainable Energy

**LOCATION** Indoor

**TIME** 2 hours

## GOALS

To understand the difference between of renewable and non-renewable energy sources. Participants got information about non-renewable and renewable sources of energy. They discover how to measure speed of wind.

## SUMMARY

The World currently relies heavily on coal, oil, and natural gas for its energy. Fossil fuels are non-renewable, that is, they draw on finite resources that will eventually dwindle, becoming too expensive or too environmentally damaging to retrieve. In contrast, the many types of renewable energy resources-such as wind and solar energy-are constantly replenished and will never run out. This workshop focus on wind power. Wind turbines turn in the moving air and power an electric generator that supplies an electric current.

## MATERIALS & EQUIPMENT

- presentation, projector, laptop
- plastics cups, cardboard,
- tape, pin, scissors
- pencils with rubber

It has pros and cons, unlike conventional power plants, wind plants emit no air pollutants or greenhouse gases so source of clean electricity. Although wind power plants have relatively little impact on the environment compared to fossil fuel ones, there is some concern over the noise produced by the rotor blades, visual impacts, and birds and bats having been killed by flying into the rotors. Experts predict that by 2050 the answer to one third of the world's electricity needs will be found blowing in the wind. participants will build an anemometer and learn how to measure the speed of wind with it

## USEFUL LINKS

video - How to make an anemometr?

[www.youtube.com/watch?v=w65F-ZyMw-c](https://www.youtube.com/watch?v=w65F-ZyMw-c)

article

[www.argonauta.hr/3396/eko-patrola-borbi-s-vjetrenjacama/](http://www.argonauta.hr/3396/eko-patrola-borbi-s-vjetrenjacama/)





## ACTIVITIES

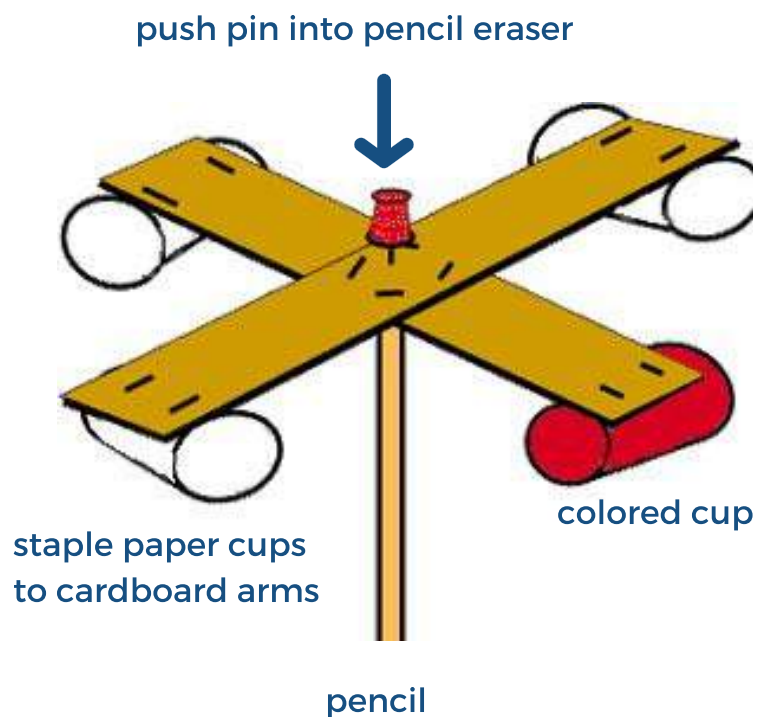
### TASKS

#### I. Write down the...

Ask participants to write on a paper where they are using energy in everyday life (at school, at home...), 3 mins for example, so they can feel why energy is so important in our lives and about the huge amount we use it.

#### II. Experiment

Make an anemometer. Using anemometer meteorologist measure speed of wind. Go out with participants and do your own observation.



#### III. Work in group, discussion

Separate participants in 2 groups.

Theme: windmill in our neighborhood.

One group are support this ideas („Yes“) second disagree with it („No“). They need to prepare 5 reasons to present their rights. Participants will get printed informations and pictures of windmills with some more details so they can use it during their work.

# 5

# CAMPAIGNS

**TOPIC** Change Climate Change

**LOCATION** Outdoor/Indoor

**TIME** 3 hours

## MATERIALS & EQUIPMENT

- 4 tables, music system + speakers
- big poster paper, paper and hard base for interviews, pens, pencils, colors, markers
- glue, tape, scissors, envelopes

## GOALS

To join the campaign “Change Climate Change” by organizing a local action in our community, Murter Island. To involve the current Eco-Patrol team in the community by leading eco - activities that involved all kind of local people. To learn about Climate Change and specific actions that we can take to decrease the problem.

## SUMMARY

Climate change is one of the topics linked with environmental, health and economic aspects most discussed lately. In 2016 crucial events have engaged citizens around the world and have pushed for better decision making to slow down climate change. We can highlight COP21, where 195 countries adopted the first-ever universal, legally binding global climate deal.

We want to contribute to this development through our activities and encourage people to join us and help us raise awareness about the need to reduce the greenhouse gases and other negative impact on the environment. The format was an Open Quiz and it took place in the center of Murter where participants were divided into groups: water, energy, waste. The final goal was to create a big poster about the given topic, and at the same time, learn about it and its relation with Climate Change in a fun way.

## USEFUL LINKS

about campaign

<http://www.yeenet.eu/index.php/campaigns/climate-campaign>

article

<http://www.yeenet.eu/index.php/members/member-news/1383-news-from-actions>





## ACTIVITIES

The format was an Open Quiz and where participants were divided into groups. Each group had a main topic to develop: water, energy and waste. The final goal was to create a big poster about the given topic. Through different tasks, groups collected the keys to move on to the next step. Water Team discovered the quantities of water that we use in daily life and ways how we can avoid wasting it. Energy Team got to know better what are the “energy vampires”, such as electronic devices that take power even when they are not being used. Finally, Waste Team talked about 3 sustainable R’s: Reduce, Reuse and Recycle. At the end, all the teams met together and there was a common discussion about how the problem of climate change.

### TASKS

#### I. Secret code

Decode the message and find a flag or symbol for your team.

Once they finish tutors give them the place where they can find the next hidden task.

#### II. Word search

In this tasks they’ll have to find words related to their topic. In the description of the words to find there are tips about how to save water, energy and recycle. Once they finish tutors give them the place where they can find the next hidden task.

#### III. Match pictures

Each team have a bunch of elements to put in order, for example Water team, will put in order the elements from the one which use less water to the one which requires the most.

#### IV. Interview

Help by the tutors, the participants find up to ten questions to asked to local people about their habits and ideas about their team topic. All of them thought about questions to ask to people of Murter in popular places where people usually hang out. Therefore, locals in restaurants or even at the hairdresser shared their time, experience and opinions with us.

#### V. Cards

Using the information contained in the previous activities write some cards with short sentences of specific simple actions that you can do in your daily life and distribute them in between the people of the Community. .

#### VI. Eco-contract

participants made their own Nature Contract about what are they willing to do for their environment based on what they learn with the activity.

#### VII. Final discussion

At the end, all the teams met together and there was a common discussion about how the problem of climate change affect the issue of each group and participants were free to share all their ideas about specific actions that we can carry on to reverse and improve the situation of the climate in our planet, that depends on all of us.

#### Discussion questions

- What information surprised you the most?
- What is the actual state of your topic?
- Which new trick did you learn about recycle, save water and reduce energy vampires? (explain to others what's means each concept)
- Did local people notice differences in weather and seasons comparing to the past?
- Do you think that your own behaviour can makes a difference? (Here we can give them data about how much we can change with little actions in our daily life)



# 5

# CAMPAIGNS

**TOPIC** Dry Stone Walls

**LOCATION** Outdoor

**TIME** 1-2 hours

## MATERIALS & EQUIPMENT

- tools like shovels, rakes, buckets, shears...
- gloves
- bottles of water
- sandwiches, fruits, snacks

## GOALS

To take care of cultural heritage of the island.  
To involve participants in field work by organizing a local rebuilding action about dry stone walls in the neighborhood. To involve Eco-Patrol team in the international team during short EVS project called "Dry Stone Wall Extravaganza II" as well as help in a project in Modrave called "Olive is our island".  
To learn about the history an archaeological site, understand the hard work farmers have and explained the value of preservation the intangible cultural heritage of their area.

## SUMMARY

Dry stone is a building method by which structures are constructed from stones without any mortar to bind them together. Dry stone structures are stable because of their unique construction method, which is characterized by the presence of a load-

bearing facade of carefully selected interlocking stones. The "Dry stone wall extravaganza II" EVS project aims at promoting Archaeological site Colentum as valuable part of Europe's cultural heritage. Main task of this workshop is pruning of indigenous species of olive and fig trees, cultivating, planting and watering of aromatic herbs, and along with adults they participated in the reconstruction of dry stone walls, traditional intangible heritage of the island.

## USEFUL LINKS

Facebook

[www.facebook.com/udruga.modravemurterbetina](http://www.facebook.com/udruga.modravemurterbetina)

[www.facebook.com/evsdrystonewallextravaganza/article](http://www.facebook.com/evsdrystonewallextravaganza/article)

[www.argonauta.hr/en/2603/2603/](http://www.argonauta.hr/en/2603/2603/)

website

<http://colentum.info/en/>



"We need the contact with nature,  
the feel of wilderness,  
the exploration of the environment.

What we value today  
is what we will preserve tomorrow"



**This e-manual was created by Argonauta Association**

Association for Nature and Environment Conservation  
and Sustainable Development  
Pijaca Društva seoske izobraženosti bb  
HR - 22243 Murter  
Hrvatska  
Tel/fax: +385.(0)22.434.827  
mail@argonauta.hr