



5 days activities on natural and anthropogenic risks at sea for nautical high school students

Francesca Malfatti, **Giulia Massolino**, Alessia Rossi, Alice Affatati and OGS researchers



National Institute of Oceanography and Applied Geophysics, Trieste - ITALY





OGS is a National Research
Institute

OGS'roots date back to the
School of Astronomy and
Navigation founded in Trieste
by empress Maria Theresa of
Austria in 1754





Marevivo NGO

Mission:

Biodiversity preservation,
sustainable development,
MPAs promotion, fight
against pollution and UUI
fisheries, environmental
education





Nautical Institute T. Di Savoia – L. Galvani

Nautical Institute's roots date back to the School of Astronomy and Navigation founded in Trieste by empress Maria Theresa of Austria in 1754





Goals:

- Rising students awareness on natural and anthropic risks related to the sea;
- promoting OGS's role in understanding and preventing natural and anthropic risks;
- connecting students to researchers;
- informing students on job opportunities in research institutions;
- cultivating students personal awareness and responsibility in natural and anthropic risks prevention.





DAY 1 (29/01/2019)

Introduction conference
by Marevivo & OGS

Speakers:

- Dr. Marina Cabrini
- Dr. Paola Del Negro
- Dr. Annalisa Franzo
- Dr. Federica Nasi
- Dr. Alfred Beran

Focus on water
microorganisms biodiversity





DAY 2
(20/01/2019)

Beach cleaning

OGS participants:

- Francesca Malfatti
- Francesca Petrera
- Davide Anietta
- Giuseppe Siena
- Leslie Alcazar
- Celia Laurent
- Larissa Ferrante
- Alessia Rossi
- Giulia Massolino





Objectives

- Rising awareness on the spread presence of litter on the beaches (also on those apparently clean)
- Rising awareness on the effort necessary to remove them





DAY 2 - II part

Plasticamente – edutainment game

Designed by:

- Dr. Francesca Malfatti
- Dr. Giulia Massolino
- Dr. Alessia Rossi

Participants OGS:

- Francesca Malfatti
- Francesca Petrera
- Davide Anietta
- Leslie Alcazar
- Celia Laurent
- Larissa Ferrante
- Alessia Rossi
- Giulia Massolino



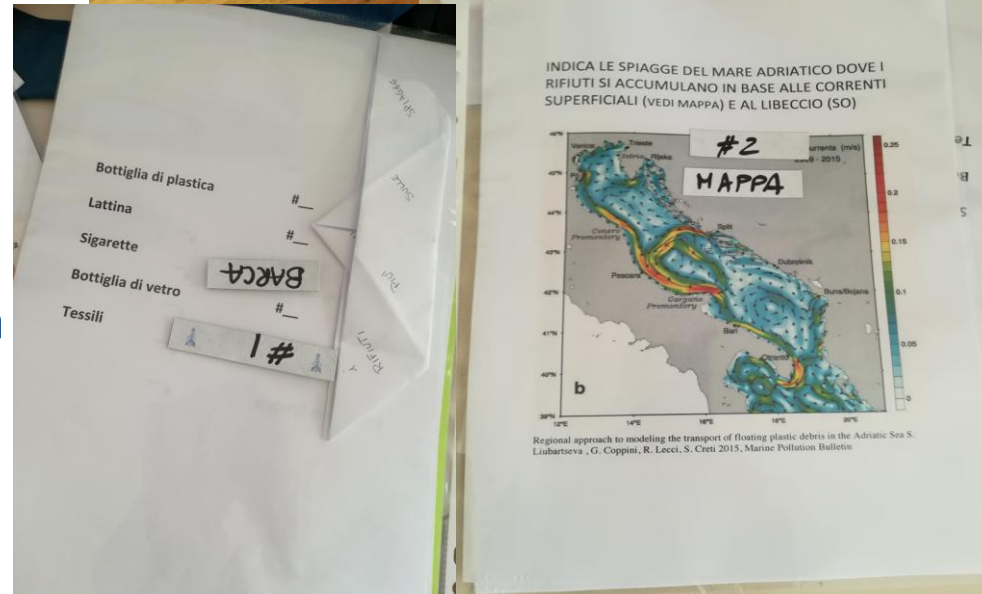
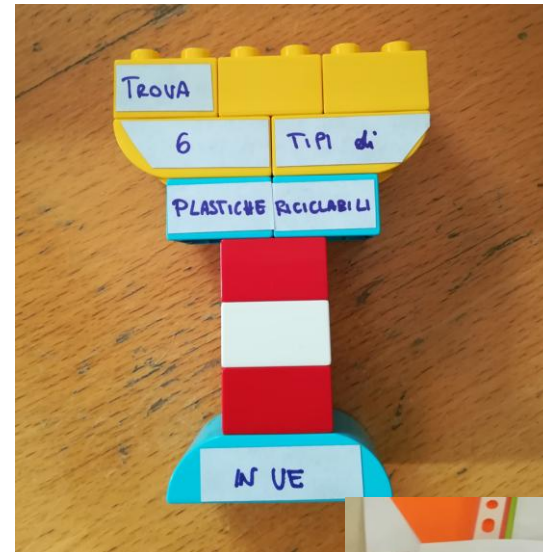


Format

4 groups – each question associated to a puzzle

Questions:

- Order the litter on the beaches following abundance order
- Indicate accumulation zones, considering winds and currents
- Connect each type of garbage with its degradation time
- Indicate the 6 plastic types recyclable in Europe among the list of 140 and connect them with the correct symbol and acronym
- How many times can a piece of plastic be recycled?





Objectives

- Knowledge on the most common type of litter on Italian beaches
- Knowledge of the 3 factors responsible for the accumulation zones: currents, winds and anthropogenic sources (*)
- Awareness of the long degradation time of most common litter types
- Knowledge of the different kinds of plastic produced
- Knowledge on which of plastics are recyclable and how to recognise the acronym and the symbol on every-day use items
- Knowledge on how plastics can be recycled and reutilised
- Awareness on the potential of the second-life of plastic items
- Awareness on the maximum number of times a plastic item can be recycled (conserving its mechanic proprieties)



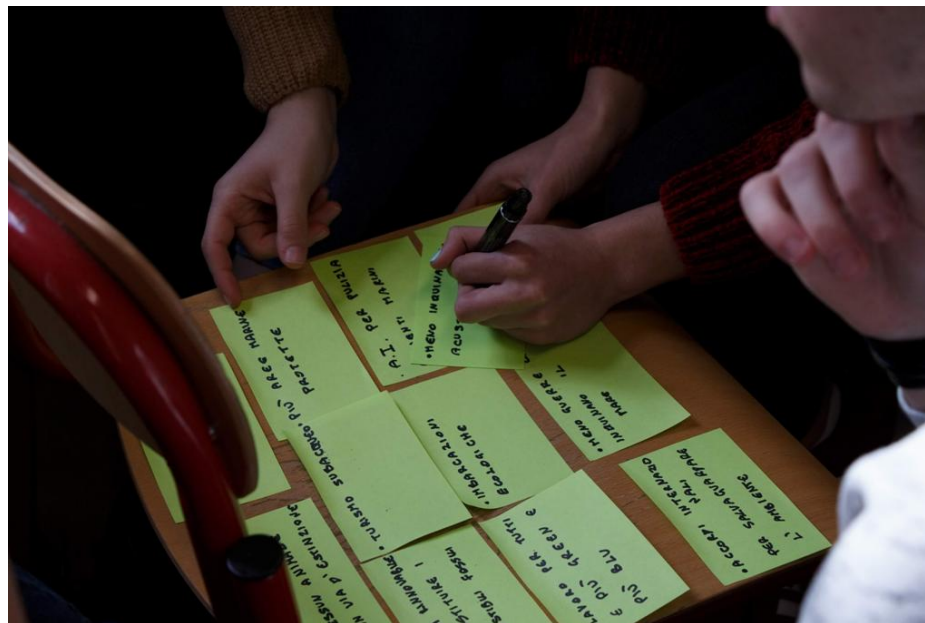


DAY 3 (31/01/2019)

Focus group – inspired to the 3 horizons method

Participants OGS:

- Francesca Malfatti
- Giulia Massolino
- Simone Libralato
- Nicoletta Pastore
- Alessia Rossi
- Igor Celic
- Gianluca Coidessa





DAY 3

5 groups

Focus on **human-sea**
interaction in the Adriatic
region





Objectives

- Awareness on the existence of different possible future scenarios
- Awareness on natural and anthropogenic risks
- Awareness on natural and anthropogenic crisis factors in the future scenarios
- Awareness on future desirable scenarios on the chosen topic
- Development of analytical skills (crisis – desires – how to arrive there)
- Awareness on the role played by everyone to obtain a desirable future





DAY 4 (1/02/2019)

- ### Visit to the Borgo Grotta Gigante OGS headquarters
- Dr. Angela Saraò – Seismological Research Centre
 - Ing. Riccardo Codiglia – Research Infrastructures
 - Dr. Stefano Querin and dott. Nevio Medeot – Physical oceanography laboratory





Objectives

- Scientific research contributions to future challenges (natural and anthropogenic risks assessment, prevention, mitigation)
- Researchers as role models
- Career opportunities in research or in research infrastructures





THANK YOU!

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