

## PNRGM Education materials: Educational Marine Area (EMA)

### History of EMA

An educational marine area is a coastal maritime zone managed by primary school pupils through a participatory approach that involves them in a project of citizen action to protect the marine environment. <http://www.aires-marines.fr/Proteger/Sensibiliser-le-public/Les-aires-marines-educatives>

The concept of an " **Educational Marine Area**" was born from the imagination of the children of Tahuata primary school (Marquesas Islands). Its launch follows the *Pakaihi i te moana* oceanographic campaign, which took place in the Marquesas in 2012. Following discussions with scientists, the children expressed their wish to become responsible for their own marine protected area in the bay opposite their school (*see annexe, the methodology booklet for an EMA*).

French Polynesia, in collaboration with its partners, decided to structure the approach around an "Educational Marine Area" (EMA) label rewarding schools wishing to get involved in this marine management process. The aim is to put schools at the heart of eco-citizen schemes. The label is based on three pillars: **getting to know the sea, exchanging with professionals and managing the coastal zone**.

This educational marine area approach has been presented at numerous events, both national, regional and international (IMPAC 3 in Marseille in 2013, World Parks Congress in Sydney in November 2014, OCEANIA 21 in Noumea in 2015, National Conference on Blue Growth in Paris in August 2015, National Symposium on MPAs in Brest in October 2015). It has been a great success and appears unique and innovative in many respects.

At the Cop 21 in Paris, a partnership was signed by the Minister of the Environment, Energy and the Sea and the President of the Government of French Polynesia, to strengthen the Polynesian network of educational marine areas and **extend the approach nationwide**, in keeping with the philosophy of the Polynesian concept born in the Marquesas Islands.

On 31 May 2016, the Minister for Overseas France awarded the "Coup de Coeur" prize of the Palme IFRECOR 2015 to the Pukatai project of the 6 educational marine areas in the Marquesas Islands.

At the start of the 2016-2017 school year, a national pilot programme was launched for the creation of 8 educational marine areas. This programme is coordinated by the Ministries of the Environment, Overseas France and National Education. The French Agency for Biodiversity, a public establishment dedicated to the protection of the marine environment,

is in charge of operational implementation in partnership with the eight selected schools, local authorities and voluntary associations.

### ***Aims of Educational Marine Areas***

- **Educational**: to make its natural and cultural maritime heritage known by promoting an intergenerational approach in French and Polynesian.
- **Professionals**: to contribute to the emergence of new professions linked to heritage, in particular referents from educational marine areas to support teachers.
- **Civic**: participate in the sustainable management of the public domain that is the sea.
- **Environmental**: to raise awareness of the environment in a cross-cutting approach combining ecology, uses and culture.
- **Tourist**: to promote maritime heritage.
- **Scientific**: make science accessible to the population and young people.
- **Co-operatives**: bringing similar approaches to the Pacific.

### ***EMA and the Regional Nature Park of Morbihan Gulf***

The Educational Marine Areas are an eco-citizen approach proposed by the French Agency for Biodiversity. In 2017, the PNRGM has decided to act as coordinator of the Educational Marine Areas of its territory because it does not have the human resources to act as a referent on all of them.

In **2017 / 2018**, the Regional Natural Park of Morbihan Gulf (PNRGM) set up an Educational Marine Area on a municipality in its territory, the Island of Arz, which it runs <https://www.parc-golfe-morbihan.bzh/actualites/aire-marine-educative-de-lile-darz/>.

In addition, the PNRGM wished to promote the work of the local animators who are already working in favour of environmental education, particularly in coastal areas. However, the PNRGM was keen to support the Île d'Arz school in order to model an approach and thus be able to develop methods and animation tools that we wish to share (*see annexe, Methodology applied by the Park for EMA*).

**2018 / 2019**: 7 schools in PNRGM territory, i.e. 365 pupils, have benefited from an EMA.

**2019 / 2020**: 13 schools, i.e. more than 650 pupils, have benefited from an EMA. Among these schools are the municipalities of Pluneret, Crach' and Plougoumelen, which were the subject of the inventory of the maritime coastal built heritage carried out within the framework of PERICLES (DEMOS B2).

In **2020 / 2021**: 3 new schools will join the EMA programme, including the municipality of Bono, which has also been the subject of the inventory of coastal maritime built heritage carried out within the framework of PERICLES (DEMO B2).

### **EMA methodology**

The EMA takes place throughout the year at regular intervals. It is a work in common and exchange between the Park, the teacher, the facilitator, the pupils and the speakers (local associations, testimonies of inhabitants, professionals...).

It is organised around 6 key moments taking place in class and/or outside:

- The children's choice of area
- The choice of work themes
- Observation of the area
- The state of the area
- The time of the proposal
- Building the action
- The Balance Sheet

### **Crac'h EMA in the framework of PERICLES project (see video AME Crac'h)**

In 2019, PNRGM decided to integrate the EMA approach into the PERICLES project. It proposed to Deux-Rivières school of Crac'h, which had begun an EMA approach in 2018 / 2019, to join PERICLES. The school accepted, and in this sense, pupils of CE1, CE2, CM1 and CM2 (7 - 10 years old; 112 pupils), worked on the oyster farming theme. This theme made it possible to develop an integrated cultural heritage - natural heritage approach, addressing the question of the evolution of this know-how (intangible heritage), of the built environment (tangible heritage), of the oyster life (biodiversity) and also to discuss the location of this activity and its impact on the landscape (landscape heritage).

Cooperative work was carried out on the Baie Saint-Jean, bringing together teachers, municipality, a heritage facilitator who is a partner of the Park (Anne Jacob), retired and active oyster farmers, and amateur model-makers (Jean-Paul Cyrille, a navigator, and Jean-François Pierson, a former engineer). This site, chosen by the students, includes former oyster building sites, listed as part of the inventory of maritime built heritage (DEMO B2). These former oyster-farming sites are now threatened. Of the two huts that initially existed, only one remains today, abandoned. The children would like to transform this hut into a bird observatory; Baie Saint-Jean, set back from the dwellings, being daily frequented by the avifauna.

Since the beginning of September:

- At the end of September, the children went to their marine area (Baie Saint-Jean) to clean it, observe it, describe it and draw it (photos below).



Children cleaned up their educative marine area and observed landscape, fauna, flora and former oyster farm that can be seen in the background.

- They have regularly seen Anne Jacob, a heritage animator, who has come to talk to them in class about oyster farming, the life of an oyster and its evolution (*photograph below*).





Anne Jacob, heritage animator for Crach EMA, explains to the children, the oyster life.

- They visited an active oyster farm, and were able to talk with the oyster farmer who explained to them how the profession is practiced today.
- A retired oyster farmer (Marie-Antoinette Le Chanjour) came to class to explain to them how oyster farming was practiced in the past. She was accompanied by Jean-Paul Cyrille, a navigator who was a keen oyster farmer and who had made a model of an old oyster farm. This model showed the children how and with which tools oyster farming was practised in the past.



Marie-Antoinette Le Chanjour, a retired oyster farmer (center) tells the children of the Crac'h school about her oyster farming practice. She is accompanied on her right by Anne Jacob, nature and heritage coordinator and partner of the PNRGM, and on her left by Jean-Paul Cyrille, a navigator with a passion for oyster farming, who made a model of a former oyster farm.



Marie-Antoinette Le Chanjour in the foreground and Jean-Paul Cyrille in the background explaining to the children, based on a model of an old oyster farm, how oyster farming was practised in the past.

This intervention was the subject of an article in the local press (*see below newspaper article*).



Article published in the local press on Crac'h EMA. *Telegramme*, January 16, 2020

- A new outing to the Bay Saint-Jean, planned for March 2 but postponed for health reasons (coronavirus), aimed, on the one hand, to imagine a new use for this former oyster farm; and on the other hand, a way to make walkers aware of the protection of this place.

- The children made a cardboard model of the former oyster farm in the Baie Saint-Jean, using the boards created by Jean-François Pierson, a retired engineer (*see annex, model*).

This EMA, which runs until June, has been the subject of a video retracing the different stages of this process. This video will be broadcasted on the PNRGM website, the Pericles website (*see video EMA of Crac'h 2019/2020*).

Due to the closure of the school in Crac'h since 2 March and until further notice, because of coronavirus, the field trip could not take place and has been postponed to a date for the moment undefined. This explains its absence on the current video. However, in order to meet the schedule of expected deliverables, a first video, showing the work done in class by the children with different stakeholders, is proposed. Another one, integrating the field trip will be produced later.

## Conclusion

This EMA approach is a co-construction work between different actors of heritage and education, professionals, scientists, associations and inhabitants. It puts children at the heart of the reflection on the future of natural and cultural heritage and mobilizes them in a co-decision process, echoing participatory governance. This approach can be applied in different countries concerned by the issue of the protection and enhancement of their coastal maritime heritage.