







# First announcement

# SER Summer School - RESTORATION ECOLOGY 2020

# Monitoring restoration success of coastal ecosystems. July 2020

#### **General Information**

In early summer 2020, a 6-day summer school program on "Monitoring restoration success of coastal ecosystems" will be organized by the University of Brest in western France, under the auspices of the Society of Ecological Restoration Europe (SER-Europe), Eurosite and REVER (French restoration network). This course is intended for PhD students who work in restoration ecology and related fields, as well as a larger public, such as practionners, restorationists, sitemanagers, employees of governmental agencies or policy makers. The program includes lectures by specialists to provide a theoretical background, field works and excursions to train practical research skills and learn about specific restoration projects, as well as short presentations of research projects by participants themselves. Thus, this summer school will provide participants with a general overview on restoration ecology as well as detailed information on projects, techniques and skills. It will also give a framework for discussions between participants and specialists.

#### Thematic Framework

Western France includes a large panel of Natura 2000 ecosystems, notably on the coast and the coastal hinterland linked watersheds: coastal heathlands and grasslands, saltmarshes, sand dunes, wet grasslands, etc.. Many of them have been submitted to various human pressures, linked to land planning, urbanization and tourism. Since the mid-1980's many restoration projects have been or are still implemented:

- On highly frequented coastal capes, restoration consists mainly in public containment that allows ecosystem spontaneous recovery; it is sometimes associated with active restoration methods.
- The restoration of diked saltmarshes among which some have been reconnected to the sea

Thanks to several universities and research institutes in the region, notably in Rennes and Brest, some of these restoration projects have been or are included within the framework of research programs and in higher education programs.

Due to the great numbers of restoration projects and to the diversity of contexts, the quality of the evaluation of restoration success and of monitoring are a major concern.

The summer school will focus on the quality of the evaluation of restoration including:

- the diversity of point of views: do different stakeholders have the same vision of a restoration project?

- the adaptation of ecological monitoring to contexts, including multi-taxonomic methods.

These points will be considered both from the theoretical and the practical point of view and the program (6 days) will include conferences, discussion with various stakeholders, and field trips with on-site visits and hands-on monitoring.

#### **Practical**

- Period: 6-11 July 2020
- location: the summer school will start in Brest on Monday 6<sup>th</sup> and will end in St-Malo on Saturday 11 (from there it is easy to travel back to Brest or reach Rennes TGV train station or Dinard & Rennes airports).
- Provisional (maximum) fees: (including accommodation lunch and dinner)
  - o Permanent staff: 300 €
  - o Ph.D. student with research team funding: 250 €
  - o Non-Funded Ph.D. or master student: 200 €
    - REVER grants are available upon request and grantees will be selected depending on motivation and access to funding (see website)
- Max. number of participants: 24
- Language: English

Detailed information will be soon available at: <a href="https://sersummer19.sciencesconf.org">https://sersummer19.sciencesconf.org</a>

# **Organizing Committee**

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#### Financial support













# **Scheduled program**

#### DAY 1: MONDAY JULY 6TH

8h30 - 9h Arrival of participants at the University of Brest (UBO), Faculty of sciences. Coffee

9h Introduction to the summer school. by Sébastien Gallet

10h - 12h: Introducing talks (to be confirmed)

Diversity of Armorican coastal ecosystems

Restoration of costal ecosystem – an overview

Western Saltmarsh cases: characteristics, threat and restoration

Evaluation in restoration ecology: aim, interest and constraint (R. Jaunatre).

**12h** Lunch at the University of Brest (included?)

**13h** Departure to Crozon (about 1 hour)

Visit several coastal ecosystems and meet local stakeholders.

- "Cap de la Chèvre" Heathland site with special concern about frequentation limitation
- The "Aber en Crozon" a sand-dune/saltmarsh complex, reconnected to the sea in 1981, included in the research program PEPPS (Environmental interest of the restoration of small saltmarshes).

#### **Evening**

Dinner and Ice breaking party, with presentations of participants in a speed dating format (background, research or work theme and context, integration of evaluation in practices)

### DAY 2: TUESDAY JULY 7TH - "SURVEYS IN ECOLOGICAL RESTORATION"

The second day, on the Crozon's Peninsula will be focused on the restoration of highly frequented areas and on monitoring methods.

The morning will be dedicated to the presentation of habitat, species and methods.

The afternoon will consist in field experimentation that will aim to compare monitoring methods, modalities of some methods (quadrat size) and to evaluate observer's effect.

#### **Evening**

After the dinner, Data collected will be analysed and discussed during the evening

## DAY 3: WEDNESDAY JULY 8TH - THE "NORTH COAST"

**7:00** Leave to North Brittany coast (Erquy-Plurien, -Fréhel)

**Morning**: Talk concerning the PEPPS program at Plurien

- S. Gallet -Presentation of the program
- X Dauvergne: Vegetation dynamics
- J. Petillon / A. Carpentier: Ecological and functional approaches
- C. Dèbre: integration of sociological dynamics in saltmarshes renaturation process

End of morning: visit Islet Estuary with local stakeholders and research scientists working on the Pepps program

Lunch: picnic

**Afternoon**: Field survey experiment 2

As in Crozon, data will be collected on a saltmarsh and discussed. Sampling will include vegetation and fauna

- Vegetation along a gradient
- Fauna (arthropods)

**Evening**: reaching accommodation in St-Malo (or Mont-Saint-Michel Bay)
Analyse and discuss results and methods (after dinner)

# DAY 4: THURSDAY JULY 9<sup>TH</sup> - CLIFFS AND SAND DUNES

**Morning**: Visit Frehel Cape – How to integrate heterogeneity and scales in the evaluation of restoration?

#### Afternoon:

- Visit quarry after end of exploitation. What's next, example of Erquy's
- Visit sand dune dynamics and restoration

**Evening**: Synthesis

## DAY 5: FRIDAY JULY 10TH: RESTORATION OF WETLAND IN THE MONT-SAINT-MICHEL BAY

**Morning:** restoration of Chateauneuf marshes and peatbogs, managed by the hunting federation Visit the site, exchange with local stakeholders (site manager, National Botanical Conservatory, consulting company).

Lunch: Picnic and oyster degustation

**Afternoon:** the Mont-Saint-Michel Bay and the Mont itself

Presentation of the Bay from the Mont-Dol

Visit saltmarshes and polders. Discuss eutrophication dynamics issues

Visit the Mont

**Evening:** Last evening dinner and discussion

# Day 6. Saturday July 11th - Return to Brest.. and home!

Morning: Reaching St Malo by the coast / Or / Natural Reserve of St Brieuc Bay

The Summer school will end in Saint-Malo or St-Brieuc. From there, participants can

- reach Rennes/Paris by train
- reach the Dinard airport (fly to UK only)
- go back to Brest with organisers