# **RESTORATION ECOLOGY 2013**

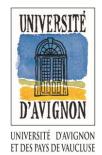


# Mediterranean ecosystem restoration



# Université d'Avignon et des Pays de Vaucluse

& Aix-Marseille Université May 13<sup>th</sup> to May 17<sup>th</sup> 2013





## **General information**

SER summer school 2013 is a 5-day program on the restoration of Mediterranean ecosystems held by the University of Avignon and Aix-Marseille University in France under the auspices of the Society of Ecological Restoration Europe (SER Europe). This course is primarily intended for PhD students who work in restoration ecology and related fields.

The program includes some lectures of specialists to provide theoretical background, and many field trips to train practical research skills and learn about restoration projects on-site, as well as short presentations of research projects by the participants. Thus, the course will provide students with a general overview on restoration ecology as well as detailed information on projects, techniques and skills. It will also give a frame for intensive exchange between participants, researchers and practitioners. We will address topics such as, restoration definitions and concepts, the importance of T-zero studies and of restoration experiments, long-term studies, plant dynamics, resilience and near-natural restoration, the socio-economic and local context issues linked to restoration projects, post-restoration management and the implementation of an habitat mitigation bank.



City of Avignon (photo by Renaud Jaunatre)

# **RESTORATION ECOLOGY 2013**



# **Program**

## Monday, May 13

#### Morning

- Welcome participants at IMBE / Université d'Avignon
- **Conferences** on human-environment interactions in the Mediterranean Basin, on the characteristics of Mediterranean ecosystems and on the restoration ecology

#### Afternoon

- **Site visit** afforestation on Mont Ventoux, dating from the end of the 19<sup>th</sup> century / beginning of the 20<sup>th</sup>: soil erosion was successfully controlled and forests devastated by overexploitation and overgrazing were successfully restored. This restoration is moving into a second, dynamic phase as, for several decades now, Beech (*Fagus silvatica*) and Silver fir (*Abies alba*), which had remained within residual stands, are recolonizing the planted pine (*Pinus nigra*, *P. sylvestris*, *P. uncinata*) and other conifer (*Picea abies*, *Larix decidua*) stands. The new, mostly heterogeneous and mixed stands which result from this "maturation process" form a complex landscape mosaic that opens interesting prospects for the sustainability of forest trees and their associated biodiversity. The excursion will focus on what past forest restoration has achieved and the current challenges faced by forest management (IMBE, INRA d'Avignon, ONF).
- **Conference** by IMBE on the restoration restoration of natural and cultural heritage (open to the general public)

#### **Evening**

Stay in Avignon, <a href="http://www.avignon.fr/en/">http://www.avignon.fr/en/</a>



Mont Ventoux (photo by Renaud Jaunatre)

## Tuesday, May 14

#### Morning

- Welcome participants at Tour du Valat
- **Conferences** on the characteristics of Mediterranean wetlands, conservation and restoration

## Afternoon

 Site visit – Salt ponds of Camargue (Salin-de-Giraud), future restoration project. Socioeconomical issues and local context will be discussed (Parc Naturel Régional de Camargue Tour du Valat, IMBE)

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#### **Evening**

- Stay in Arles, <a href="http://www.arlestourisme.com/home.html">http://www.arlestourisme.com/home.html</a>



Arenas of Arles (photo from arlestourisme.com)

## Wednesday, May 15

#### Morning

- Welcome participants at Marais du Viguerat
- Site visit experimental restoration on abandoned ricefields followed by various types of management. The importance of post-restoration adaptative management will be addressed (Marais du Vigueirat, Tour du Valat)
- **Site visit** Visit of a vernal pool in Marais du Viguerat. Concepts of reference ecosystem will be discussed (IMBE, Marais du Vigueirat, Tour du Valat)

#### Afternoon

 Site visit – Visit of the Cassaire: on-going wetland restoration project. The importance of pre-project measurements (fauna, flora, seed banks, historical ecology, landscape, etc.) and various experiments will be presented and addressed (tests of different techniques and methods) (Marais du Vigueirat, Tour du Valat, IMBE)

## **Evening**

- Stay in Arles, <a href="http://www.arlestourisme.com/home.html">http://www.arlestourisme.com/home.html</a>



Cassaire experiment (photo by Elise Buisson)

# **RESTORATION ECOLOGY 2013**



## Thursday, May 16

# **Morning**

- Welcome participants at Réserve Nationale des Coussouls de Crau / CEN PACA
- Site visit Reference ecosystem: steppe of La Crau in Peau de Meau. The concepts of resilience, resistance and disturbance will be approached (Réserve Nationale des Coussouls de Crau, CEN PACA, IMBE)

## Afternoon

Site visit – 1) Cossure which is the French government first experiment with habitat banking; 2) SPSE oil spill site; 3) Ménudelle quarry. Methods for the restoration of Mediterranean grassland ecosystems and the development of compensation through habitat banking in France will be discussed (Réserve Nationale des Coussouls de Crau, CEN PACA, IMBE, CDC-Biodiversité, Société des Carrières de la Ménudelle, Société du Pipeline Sud-Européen).

## **Evening**

- Stay in Arles or Marseille (to be decided)



La Crau pseudo-steppe area (photo by Renaud Jaunatre)

# **RESTORATION ECOLOGY 2013**



#### Friday, May 17

- Welcome participants at SIBOJAI (SIBOJAI)
- **Site visit** SIBOJAI. Passive restoration (stop of reduce disturbation) will be discussed: cases of the Berre Lagoon and of dune ecosystems (SIBOJAI, IMBE)
- Site visit Bausset stream flowing into the protected wetlands of Marais des Paluns taking away diffuse pollution of an anthropized catchment. Environmental and sociological impacts of industrialization on the wetlands will be discussed (SIBOJAI, IMBE, ECO-MED) and a pilot project of an integrated constructed wetland with local helophytes will be presented.
- Closing conference.



Soil decompaction on the Jai dunes (photo by SIBOJAI)

### Saturday, May 18 morning (optional)

- Welcome participants at Frioul Island (CEN PACA)
- **Site visit** Frioul Island. Ecosystems influenced by sea spray, attempts to restore the island and the effects of overabundant species, such as the yellow-legged gull (*Larus michahellis*) will be addressed (CEN PACA, IMBE).

The visit will be organized and free. You will just have to stay an extra night in Marseille and pay for your boat ticket (10 euro)



Frioul island (photo by <a href="http://www.ilesdemarseille.fr">http://www.ilesdemarseille.fr</a>)

# **RESTORATION ECOLOGY 2013**



# Cost

The Summer School fee includes overnight stay with breakfasts (youth hostels) and lunches. The organizers also carry all further costs for lecture rooms, working facilities, travelling during the course and general course organization.

The Summer School fee will be

200€ for Ph.D. students, members of SER-Europe

250€ for Ph.D. students, if not members of SER-Europe

250€ for others, members of SER-Europe

and 300€ for other participants, not members of SER-Europe

It has to be paid after confirmation of participation (early April). Participants have to pay their own travel costs to the South of France (closest big airport is Marseille) and back home as well as costs for dinners.

# **Application**

Interested people should apply before March, 22<sup>nd</sup> 2013. Please send your application by e-mail to <a href="mailto:ser.summer.school@gmail.com">ser.summer.school@gmail.com</a>. Priority will be given to PhD students.

The application should include

- 1) a motivation letter (1 page maximum) with complete postal address and e-mail address → present current research and motivation for attending this summer school.
- 2) A resume.

Confirmation of participation will be made early April 2013, and more detailed information will be send to the participants shortly afterwards. The number of participants will be around 20.

For further questions please contact Elise Buisson.

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http://chapter.ser.org/europe/upcoming-events/training/