

## **Newsletter n.5 of LIFE RINASCE Project**

This is the fifth issue of the "LIFE RINASCE" Project newsletter.  
Inside you will find a summary of the most recent activities and new appointments.

### **The activities continue ...**



Despite the health emergency for Coronavirus, LIFE RINASCE activities continue, albeit with some slowdown.  
This newsletter is a summary of the activities carried out in 2019 and in the first 6 months of 2020.

We remind you that, with the migration of the regional infrastructure to the latest technologies, the project website has also been restructured, thus offering more space for visual communication, new sections and also improves usability.

The new address is:

<https://progeu.regione.emilia-romagna.it/it/life-rinasce>

Update your bookmarks and keep following us.

### **Post operam monitoring of the intervention carried out along the Eastern Cavata has started**



After completing the restoration of the Cavata Orientale canal in Carpi in 2018 and after waiting for the recolonization of the area by plant and animal species to begin in 2019, monitoring activities were started in spring 2020 post operam of the intervention.  
The project involved the partial redevelopment of the Cavata Orientale canal and the construction of a large area of 3 hectares destined for the flooding of the floods, inside which a semi-permanent wetland area was created to be colonized by plants and animals typical of the wetlands .

The environmental monitoring started during 2020 aims to verify how the area will be gradually colonized, in particular by analyzing the following components: amphibians, fish fauna, odonates, carabids, riparian vegetation, macrophytes.

Beyond the aforementioned monitoring, the inspections carried out show that the area has started to be progressively affected by the presence of sedentary and migratory birds.

### **Environmental monitoring along the canals: the first standings**

Post operam monitoring was resumed during 2019 and 2020 along the other redeveloped channels subject to the project's intervention: Collettore Alfieri, CABM and Diversivo Fossa Nuova Cavata.  
The results for 2019 show a slow but progressive improvement in the ecological components investigated, in particular as regards riparian vegetation, macrophytes, amphibians and carabids.  
Please refer to the forthcoming technical manual for a detailed examination of the results, summarized below.

## Focus: the Collettore Alfieri canal

### 1. Vegetation survey

The following season, remodeling operations were carried out, most of the low-slope bank was colonized by the Phytocoenon with *Potentilla reptans* and *Ranunculus repens*. It is a mesohygrophytic plant community, whose presence was confirmed also in 2019. Compared to 2018, the incidence of the hygrophilous species of *Phragmites australis*-*Magnocaricetea elatae* has significantly increased. Among the most representative are the *Lycopus europaeus*, *Mentha aquatica*, *Iris pseudacorus*, *Lythrum salicaria* and the elophytes *Phragmites australis*, *Carex riparia* and *C. elata*. Their presence testifies that a probable evolution of phytocoenosis is underway towards the establishment of ever more structured helophytic formations (reeds).

### 2. Flora survey

This is the LIFE RINASCE pilot project where the effects of the interventions are more evident, also because these have led to the creation of periodically flooded wetlands on the side bank.

This new environment, in addition to having laid down one of the shores, has led to the formation of habitats that were previously completely missing which have increased the floristic diversity, even if the plant component is still in an evolutionary state.

In fact, 196 species are currently detected. Of these, 10 are target species of conservation interest, 3 more than the previous situation.

Good colonization from the shores by species of the genus *Carex*. It is a first step for the formation of stable shores of banks, rare environments in our plain and very important also for numerous fauna species.

Noteworthy is the discovery of two specimens of *Allium angulosum*, a typical species of wet meadows, now very rare in the province.

The shrub curtain planted during the intervention is substantially in fair condition but will still have to be followed for a few more years.

The obvious improvements must however be followed over time to understand how these ecosystems will evolve until a situation of better stability is reached.

Note that some of the lowlands are constantly flooded with the foreclosure of the colonization of some species; a lower flow of water should be allowed.



Picture 1 - Different colonization of the lowlands in relation to the constant presence or absence of water

### 3. Amphibians

During the monitoring of amphibians along the 4 channels covered by LIFE RINASCE, the presence of only one species, Toad emerald (*Bufo viridis*), of target amphibians of conservation interest object of research in only one of the channels was detected, while it was ascertained the presence of the invasive alien species of management interest *Lithobates catesbeianus* in all channels with the exclusion of the Diversivo Fossa Nuova Cavata, where it had been found during the ante-operam investigations and also during the present study, however, it was identified near the site of investigation.

**For *Bufo viridis*, the floodable wetlands created on the hydraulic right bank of the Collector Bishop, the only site where this species was found, were certainly very advantageous, going to constitute a suitable habitat for laying eggs.** In addition to a singing male, larvae in 4 of the 8 bassure were found on April 15, 2018 and their numerical estimate was made. Taking advantage of some favorable circumstances such as the low water level, with good clarity, in all the bassure with the presence of larvae and the fairly homogeneous distribution of the larvae on the bottom of the bassure, an overall estimate was made by counting the larvae present in a surface of 1 m<sup>2</sup> and relating the result to the total surface occupied by the larvae reaching a total of about 12,000. For the total number and the spatial distribution of the occupied lowlands, the larvae are estimated to be the result of the laying of eggs by at least 3 different females. The finding was repeated during the survey on May 12, 2018 with an estimated total of about 7,000 larvae distributed in only 2 contiguous bassures; by virtue of 2 different degrees of development of the larvae found, it is estimated that in this case they are derived from at least 2 distinct ovations.

The results obtained in the course of the survey carried out in 2019 are comparable to those of 2018 with the confirmation of the reproduction of *Bufo viridis* starting from the month of April, with the arrival of the first rains, in the floodable lowlands created in the Collettore Alfieri canal.

In light of these findings, it is possible to imagine that an improvement in the environmental conditions in the channels covered by the interventions planned in LIFE Reborn, especially the improvement and development of the halophytic vegetation, could be followed by a recolonization of the same by, at least, *Pelophylax* sp.



Picture 2 - Green frogs (*Pelophylax* sp.).



## Workshop with a study visit to the restoration works



On Friday 17 May 2019 a workshop and guided tour was held - dedicated to the comparison on the evolution of the restored canals.

The meeting, dedicated mainly to technicians, but open to all interested parties, allowed to discuss directly on the field by observing the effects of the redevelopment interventions carried out along the channels Collettore Alfieri, Collettore Acque Basse Modenesi and Cavata Orientale.

[Workshop pictures](#)

## A course for technicians

The free training course on the integrated redevelopment of channels organized by the LIFE RINASCE Project on 8 and 9 October 2019 ended with wide participation.

The first day of lectures in the classroom, hosted in the "Prampolini" room of the headquarters of the Reclamation Consortium in Reggio Emilia, had a total of 75 participants, divided between consortium technicians, the Region, ARPAE, Local Bodies, Universities and Research Institutes and free professionals.

The second day, dedicated to the didactic excursion along the restored canals, saw the participation of 35 people.



[To learn more](#)

[Picture gallery n. 1](#)

[Picture gallery n. 2](#)

## Spontaneous initiatives from the territory

A key aspect of European projects is represented by the degree of involvement and awareness they transmit to the territory.



In this sense, the initiatives organized by the Municipality of Novi di Modena are important. On 1 December 2018 the Municipality, directly involving the citizens, carried out a first intervention for the construction of a green strip on the tomb of the Gazzoli canal in the Saracca locality, created through the planting of hedges and shrubs. The activity, carried out in collaboration with the Novese Naturalistic Circle (CNN) and ATC MO1, planted over 1,000 plants.

The area concerned is located next to the intervention section of the LIFE RINASCE project along the Collector Acque Basse Modenesi

On 2 March 2019 one hundred and fifty people, including school children, asylum seekers from Guinea and the Ivory Coast who are staying in Sant'Antonio, a hamlet of Novi di Modena, and volunteers from numerous associations who participated in the "Tree Festival", have planted an additional 1200 plants within the aforementioned hectare of land.

[Pictures of 1° dicembre](#)

[Pictures of the "Tree Festival"](#)

[TV video](#)

## **The activities continue ...**

The project continues its activities.

Environmental surveys are underway which will provide further data on the evolution of the channels and will allow to fully evaluate the results achieved.

A technical manual dedicated to the project is being drafted: the volume is aimed primarily at industry experts and is intended to be an operational tool to allow correct application of the techniques developed by the project in similar contexts on a regional and national scale.

The project also foresees training sessions for 2020 and its final conference: the staff is evaluating what the best organizational methods can be according to the current health emergency.

All updated news is available on the website, available at:

**<https://progeu.regione.emilia-romagna.it/it/life-rinascce>**