

BELGIUM

Biodiversity restoration, preservation and enhancement

Location

Romedenne

Programming period

2014 – 2020

Priority

P4 – Ecosystems
management

Measure

M7 – Basic services & village
renewal

Funding (EUR)

Total budget 43 044
EAFRD 17 218
National/Regional 25 826

Project duration

2016 – 2017

Project promoter

NATAGORA asbl

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www.natagora.be

An environmental NGO implemented a project to preserve and maintain an old clay pit that provides shelter to a number of rare and endangered species.

Summary

An old clay pit site in Romedenne is a mosaic of wastelands, ponds and small woods that has become a nature reserve, creating a kind of paradise for amphibian and reptile species. The site was included in the Natura 2000 network as it has become a habitat of several rare and endangered species.



An environmental NGO that manages the site used EAFRD support to carry out several activities to preserve and enhance the site including: the deforestation of the edges of ponds; clearing bushes and shrubs; setting up an enclosure for grazing and building fences to keep away boars; building up piles of wood that favour microhabitats and the wintering of herpetofauna; digging ponds and creating additional glades.

Results

Maintenance of the 3 ha site and its extension and improved management.

Maintenance of two meadows and their extension by 0.4 ha.

Preservation of the good condition of the network of 10 ponds with four more being dug after the project ended;

Rejuvenation of populations of three rare plants (*Nitella opaca*, *Utricularia australis* and *Hydrocharis morsus ranae*) due to the clearing of the embankment.

Lessons & Recommendations

- The project was not easy to implement given the complexity of the site, its structural diversity and the presence of very wet areas enclosed by woodland.
- The ongoing management by voluntary groups is an interesting social innovation.

Context

Romedenne is located on the municipality of Philippeville and belongs to the network of natural and ornithological reserves, South on the Sambre-Meuse line. The area is a habitat for several protected species of butterflies such as the pygmy Azure, the Exchequer as well as rare flora including shinleaf or pyrola minor, bur-reed or sparganium. The mosaic of wastelands, ponds and small woods composing the 6 ha reserve are an ideal place for the species of amphibians and reptiles in the region. For example, it acts as a reservoir for the threatened Crested Newt (*Triturus cristatus*), which was able to colonize other nearby reserves.

The first motivation for the creation of the reserve dates back in 1990.

Objectives

This project is targeted at a Natura 2000 site and aims to:

- Restore wetlands;
- Restore and maintain grassland and moors through deforestation, brush clearing, and possibly fencing to prevent boars entering the site; and
- Restore and maintain the natural habitat for rare or threatened species to ensure their favourable conservation status.

Activities

One of the characteristics of this reserve is the particular condition of its soil. The extraction of clay is part of its history: a brickyard was active on the municipality until 1997, and is still allowed to extract 5 tonnes of clay a year, in line with a partnership agreement signed between the enterprise and the nature reserve managed by the NGO Natagora. A periodic re-use of clay remains possible in order to regenerate pools and maintain a semi-open environment conducive to a diversity of amphibians, reptiles and butterflies. Despite the existence of a permit for extraction, this activity has only occurred once and was not repeated owing to a lack of interest.

The land occupied by the reserve forms a long narrow strip parallel to the road. It includes a mosaic of habitats, some dry, others wet. On the dry parts, there is a mix of open wasteland that is slowly being recolonised by birches, willows, alders, oaks and hornbeams, as well as some beautiful shrubland. The wetlands include aquatic environments of various sizes and depths, in particular

two shallow ponds occupying the north-eastern end of the reserve and two other large pools that were created by at the end of the 1990s. One of them is fed by natural underground aquifers. The water level of these pools varies a lot during the year. These wetlands are surrounded by helophyte plants, including a few rare species, such as the bur-reed (*Sparganium emersum*).



Targeted species:

- The crested newt (*Triturus cristatus*).
- The little green frog (*Pelophylax lessonae*).
- The Midwife toad (*Alytes obstetricans*).
- The European smooth snake (*Coronella austriaca*).

Positive effects are also expected on the following vulnerable species: *Vipera berus*, *Natrix natrix*, *Alcedo atthis*, *Plebejus argus*, *Carterocephalus palaemon*, *Satyrium ilicis*, *Brenthis ino*, *Dactylorhiza fuschii*, *Pyrola minor*, *Veronica scutellata*, *Sparganium emersum* and *Utricularia australis*.

The following habitats are also favoured to a lesser degree:

- Sub-Atlantic lowland hay meadows.
- *Molinia caerulea* meadows and related communities.
- Charophyte submerged carpets in oligotrophic water bodies.

The rehabilitation of the site by Natagora included the following distinct tasks:

- Deforestation of the embankment and pond edges;
- Cleaning up the lower part of the reserve (terrestrial habitat of amphibians of Community interest);
- Installing an enclosure for autumn grazing, and erecting fences to avoid boars;
- Building of piles of wood for favouring microhabitat and the wintering of herpetofauna; and
- Digging ponds and creating additional glades.

Main Results

These actions helped to simplify the management of the site through the creation of new glades accessible to grazing. In addition, they prevent the penetration of wild boar on the most sensitive parts of the area covering around 1.8 ha and also allow the populations of the herpetofauna to redevelop.

Specific achievements:

- (i) Maintenance of the 3 ha mosaic of habitats and its extension and improved management;
- (ii) Maintenance of the two meadows on the site and their extension by 0.4 ha (the part processed through mulching);
- (iii) Preservation of the good condition of the network of 10 ponds of varying size and shape that are favourable to the targeted species, while preserving the submerged carpets of stoneworts in oligotrophic water bodies habitats in compliance with the Bern Convention.

In addition the project motivated teams of volunteers who dedicate time for the preservation of this exceptional site and have made it possible to quickly improve it. There are now three conservationists who take care of the site in a sustainable way. Four projects have already taken place (two with naturalists, one with a public institution for youth protection and one with an enterprise, as a team-building exercise).

In addition, restoration work has made the site more accessible to mechanical work. This ensures its good management in the longer term – i.e. mowing by tractor and possibly grazing in the future.

An additional four ponds were dug in 2017 after the project end and three of them now host clutches of *Triturus cristatus*. The opening of the embankment helped to revitalise the populations of three rare plants (*Nitella opaca*, *Utricularia australis* and *Hydrocharis morsus ranae*). On the longer term, Natagora hopes to develop a walking trail along the natural reserve with clear views.



Key lessons

The project was not easy to implement given the complexity of the site, its structural diversity and the presence of very wet areas enclosed by woodland. Nevertheless, all actions could be done thanks to exceptional conditions of frost and dry ground during the months of December and January 2017. The grinding of the deforested area could be replaced with pulling. This allowed, on the one hand, the release of stumps to be greatly limited and, on the other hand, these stumps to be gathered in heaps that will serve as hibernation sites for herpetofauna. All the exportable wood could be used for energy production.

The management of Natura 2000 area is always a unique experience. In this case, the partnership agreement signed between the brickyard company and the natural reserve back in 1997 for a duration of 22 years was very original at the time, even though the company did not exercise its right to dig a certain amount of clay annually.

The ongoing management by voluntary groups is also an interesting social innovation.

The increasing population of the *Triturus cristatus* in the new pools is fairly good news. The study of the population was based on an innovative survey technique, which hadn't been previously used in Wallonia, and provided good results (study of sponges on strips).

Financial support for the erection of fences to prevent access to the wild boar is fairly recent in Wallonia, too, and Natagora will closely monitor its impact on the reptilian and amphibian populations.

Additional sources of information

<https://eunis.eea.europa.eu/habitats.jsp>

<http://entresambreetmeuse.natagora.be/index.php?id=1756>

<http://biodiversite.wallonie.be/fr/154-argilieres-de-romedenne.html?IDD=335544900&IDC=2831>