

WP2 - Actions 9&10 - Wetland restoration in a former clay extraction site

't Pompje is a 100ha former clay extraction site in the Belgian province of West-Flanders. It is now a military area (a radio communication base or 'antenna park') and is part of the Natura 2000 network (Special Protection Area, SPA). It consists of low-lying grassland and brackish groundwater and is managed by the Flemish Agency for Nature Conservation. These elements provide excellent conditions for 'wetland' restoration. The two main goals in this natural restoration project are salt meadows and reed marsh.



The first phase of habitat restoration started a few years ago (2008-2009) and involved groundworks to restore the salt meadows and rising the water table for the development of reed marsh. To create the best possible circumstances for these habitats, 't Pompje has also been isolated hydrologically from its agricultural surroundings.

The shallow excavations and the higher water table had a very positive effect on a number of bird species typical of meadows and marshland. In 2012, 27 avocets and 14 redshanks bred in 't Pompje, compared to 10 of each in 2008. During the 2013 breeding season, two western marsh harrier and one great bittern territories were found. When comparing breeding seasons before and after restoration, most bird species show a very positive balance.



Restoration works in the reed marsh: the reed marsh is located in the centre of the military communications facility ('antenna park'). Shallow excavations will be dug to create more open water (blue colour) and reedbed (yellow and orange). The pathways leading to the military radio mast will be heightened to keep it accessible (brown colour).



At 't Pompje, the RESTORE Project aims at testing new technology for nature management during and after ecological restoration of former extraction sites. A hydrological study was carried out in 2013 which investigated:

- the effects of irrigation with external, non-purified water (which is considered of bad quality in this site);
- all possible methods to reduce the nutrient load in the water system in order to avoid eutrophication.



In the summer of 2014, the second phase of habitat restoration will begin. First, parts of the marshland will be restored. Where the reed marsh is not developing well, more shallow excavations will be made to create further open water and water reed, creating more breeding opportunities for bitterns.

In 2015, the results of the hydrological study will be implemented on site by the construction of a water treatment facility at the water inlet of the nature area. This will consist of a (vertical flow) reed bed and a shallow water pond built on the location of the former 't Pompje brick factory.

