

**Company:** Merlini Spa

**Location:** Lago Boscaccio – Gaggiano, Italy

**Objective** The project started in the 80's with the objective, initially, to monitor the status of the quality of the lake resulting from the quarrying activity with a surface of 430.000 m<sup>2</sup> and a volume of around 6 million m<sup>3</sup>.  
Later on has been adopted also a program to protect the flora and the fauna and to improve the biodiversity of the entire local ecosystem.

**Context** The lake is characterised by a large variety of algae (with few macrophytes and diatoms in the first part of season, then chlorophyte and finally cyanofites) and from typical wet areas vegetations on the banks (thipas and ditch reed), and also from the variety of zooplankton (Crustaceas, Dipteras and Rotiferas).

**Solution** Many interventions have been completed to improve the quality and richness of the life in the area. A siphon that helps the replacement of waters in the termic stratification season (that makes extraordinarily clears the waters and controls possible eutrophisation processes) , a “fish nursery” for the fries production, a systems of small channels for the fish migration from the lake to the local channels net . It has been created also a bird ringing station, managed by a local ONG for the Natural resources and Birds Protection, and a special protected area for passing birds resting and nesting.

**Result** 128 of protected species, more or less the 50 % of the birds protected species of western Europe, has been registered by the local ringing station (linked with the national wild fauna Institute INFS) life and recently many species has also elected this area for their nesting. (of special interest the presence of Pandion haliaetus, Circus Cyaneus, Recurvirostra avosetta, Botaurus stellaris Ixobrychus minutes).  
Around 2000 young students from the school of the belt of Milano are hosted every year for a lesson on biodiversity “in the field”.

