## ECOPOTENTIAL4SCHOOLS: an international game experience with students

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ECOPOTENTIAL WORKSHOP: Citizen Science in Protected Areas

## INTRODUCTION

Citizen science and information communication technology are key in connecting science and education, by expanding ecological research frontiers and public engagement. Science games, included in educational programs, are a direct and effective way of communicating. Playing *ECOPOTENTIAL4Schools*, students will deepen their ecological knowledge and awareness, engaging the foundations of the 'deductive thinking' and 'logical reasoning' necessary not only for science, but also for their future life of young students.

With its playful approach and its eye-catching graphics, the *ECOPOTENTIAL4Schools game* promote the knowledge of key environments and ecological issues among students from all Europe.

Thanks to teachers and schools managers collaboration, the game will be disseminated and inserted in the educational programs of many European schools.

In a first phase of the game, students, organised in teams, are asked to carry out a scientific research project including experimental activities. The so acquired skills will be tested with the electronic game. Players, as student "scientists", during the game will answer questions, solve problems, allocate concepts to the proper category, analyse figures and tables.



## TARGETED PROTECTED AREAS

Wetlands are a diverse array of dynamic ecosystems formed in the contact of land and water. They have long been considered unproductive and unhealthy places, and only recently it has been realized their importance for the conservation of biodiversity and for the ecosystem services they provide. Public awareness is fundamental to conserve properly and gain the maximal benefit from these environments. The *ECOPOTENTIAL4Schools game* promotes this concept by referring to some of the most important Protected European Transitional Water Ecosystems:

The **WADDEN SEA** is one of the largest coastal wetlands in the world. Almost the entire region is submerged at high tide, and half the area is exposed during low tide. The variety of habitats and high productivity lends itself to having a large biodiversity of invertebrates, fish, birds and marine mammals.

The **DOÑANA** National Park is an area of marshes, shallow streams, and sand dunes in Las Marismas, the delta where the Guadalquivir River flows into the Atlantic Ocean.

The **CAMARGUE** Biosphere Reserve includes natural habitats such as lagoons, brackish/freshwater marshes with emergent or aquatic vegetation, as well as halophilous scrubs and steppes that create a very suitable breeding habitat for waterbirds. These ecosystems are intermingled with agrosystems dominated by rice.



The **CURONIAN LAGOON** is separated from the Baltic Sea by the Curonian Spit. A very high biodiversity of communities was recorded in this territory. Particularly valuable habitat types of the site are coastal lagoons, dunes, active raised bogs, deciduous swamp woods, bog woodland and alluvial forests

The **DANUBE DELTA** Biosphere Reserve consists of a complex alluvial systems, dominated by wetland ecosystems, of a great socio-ecological and economic importance. The delta is strongly influenced by human activity that occurs at catchment level across Europe.