

**LIFE12 NAT/ES/001091**

"Conservation of river fauna of Community interest in the Natura 2000 network sites of Ter, Fluvià and Muga river basins"



## **EUROPEAN POND TURTLE** **(*Emys orbicularis*)**

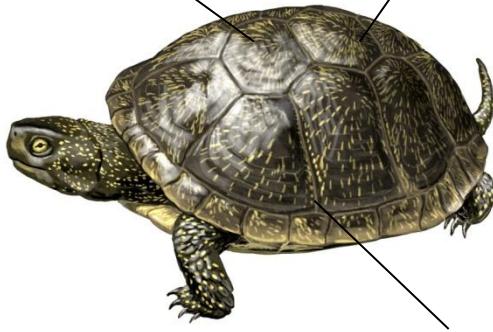
**December 2015**



# FEATURES

Its coloration is dark, with yellow spots. The shell is rounded.

It weighs between 300 and 400 grams and measures 15 centimetres (adults).



European Pond Turtle (*Emys orbicularis*)  
Illustration: Toni Llobet

It winters from the end of autumn until the beginning of spring.

## The European Pond Turtle in numbers:

<b>4 - 5 months</b>	lasts hibernation (from November to March).	
<b>4 - 10 eggs</b>	lays the female in a hole near water.	
<b>3 months</b>	incubation lasts.	
<b>7 - 8 years</b>	take males to be able to breed.	
<b>8 - 10 years</b>	take females to be able to breed.	
<b>50 years</b>	can live for.	

## Where does it live?

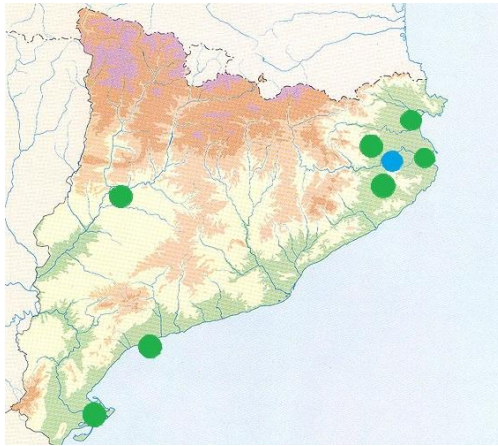
The European Pond Turtle (*Emys orbicularis*) is a freshwater tortoise. It is a reptile, in the "chelonidae" family.

It lives in freshwater areas such as ponds, marshes and slow rivers with abundant aquatic vegetation. It prefers shallow waters with lots of vegetation to hide.



# DISTRIBUTION IN CATALONIA

In Catalonia, the number of wild individuals that live in natural conditions is a little more than 800. They are mainly present near the coastal areas and mainly in Ebre, Ter and Tordera rivers basins.



- Presence of European Pond Turtle
- Places with LIFE Potamo Fauna actions

## EBRE DELTA AND SALOU DRAIN CHANNEL

A small population still remains on the area, mainly belonging to the *galloitalica* subspecies, with some *fritzjuergenobsti* subspecies individuals. From the Estació Biològica del Canal Vell, in the Delta de l'Ebre Natural Park, a work for captivity breeding and realising individuals is done.

## AIGUAMOLLS DE L'EMPORDÀ

A small populations of less than 50 individuals of the *orbicularis* subspecies still remain in the area. In the last three years, up to 32 exemplars born in captivity at the Centre de Reproducció de Tortugues de l'Albera have been released in the park.

## TER RIVER

Some spread individuals of *orbicularis* subspecies still remain along the river. From 2005 up to 166 individuals have been released, all of them born in the Albera center. In the last two years some of them have already successfully bred.

## IVARS LAKE

It has recently been introduced, with captivity individuals born at the Centre de Recuperació d'Amfibis i Rèptils de Catalunya (CRARC), belonging at *galloitalica* subspecies.

## SELVA COUNTY

In the Sils marshes, the Caldes and Santa Coloma creeks, and in several ponds and small lakes, a population of the *orbicularis* subspecies is still present.

## BANYOLES LAKE

It's one of the remaining *orbicularis* subspecies population. Thanks to the LIFE Estany project, the population, which it was almost extinct, has now more 100 individuals. The first reproduction hints have been observed.

## To know more...

In Europe we can find seven different genetic haplotype European Pond Turtle, which correspond to different subspecies. In the Iberian Peninsula three of these subspecies are present: *E.o. fritzjuergenobsti*, *E.o. galloitalica* i *E.o. orbicularis*.

## THE THREATS

The European Pond Turtle is widely distributed in Europe but with very small populations, most of them, isolated between them. This fragmentation and isolation of their populations makes it very vulnerable. The gradual reduction of populations and the number of individuals has become very evident in the last 20 years and is now an endangered species. **In Catalonia is considered in the endangered category.** It was formerly widely distributed, as evidenced by the fossil records and historical references.

### HABITAT DESTRUCTION

One of the main dangers is the destruction and pollution of the habitats and waters where they live. The main causes are the urban construction, roads, power lines and the pollution caused by the intensive agriculture.

### INVASIVE TURTLES

Another factor is the introduction of invasive turtles. They are popularly known as "Florida Turtles", but they are a group of different species and subspecies of turtles that come from Central America and the United States. Turtles are very well adapted to our climate and environment when released, and they can cause problems: they are large predators, they can transmit diseases to humans and animals such as salmonellosis and they predate on the native turtles.



Florida Turtle  
(*Trachemys scripta elegans*)  
Illustration: Toni Llobet



Diferent invasive turtles

### CAR ACCIDENTS

Individuals run over by cars are also another threat because they often move around their areas and they have to cross roads and can be run over by cars, trucks, buses ...



### THE NOTE

The European Pond Turtle is included in Appendix III and IV of the EU Habitats Directive as a species of Community Interest. For their protection is needed to designate special areas of conservation and strict protection.

# THE SPECIES RECOVERY IN CATALONIA

In recent years, due to the species situation in Catalonia a series of initiatives designed to conserve existing populations have launched, strengthening them with specimens born in captivity and preserving their habitats.

## ESTACIÓ BIOLÒGICA DEL CANAL VELL

Located in the Ebre Delta it is working on a project of breeding subspecies *galloitalica* that has allowed in recent years to release individuals in different places of the Natural Park.

## CENTRE DE RECUPERACIÓ D'AMFIBIS I RÈPTILS DE CATALUNYA (CRARC)

Located in Masquefa, it carries out a program of captive breeding subspecies *galloitalica* to introduce the turtles recovered in Ivars (Urgell), the largest body of water in inland Catalonia. The adaptation of the turtles released is a sign that suggests the fast establishment of a new population.

## FUNDACIÓ ACCIÓ NATURA AND FUNDACIÓ EMYS

For over 20 years the association ADEPAR and these other two foundations have been working in the conservation and improvement of the habitats of the region of La Selva county, where the best natural population of the species in Catalonia is found.

## CENTRE DE REPRODUCCIÓ DE TORTUGUES DE L'ALBERA

In the early 90s of the twentieth century this center was able to catch the last nine specimens of European Pond Turtle remaining in the Lower Ter and keep them in captivity in their facilities. These individuals, combined with others from the region of La Selva, have allowed to have some groups breeding and subsequently released to Aiguamolls, Ter River and Banyoles lake.

This group belongs to *orbicularis* subspecies and has allowed in recent years, thanks to various projects LIFE (LIFE Emys Ter and LIFE Estany) to release a total of 403 individuals until December 2015.

The result of these releases, have now been detected in specimens born in the wild and several gravid females that give a glimmer of hope for the recovery of the European Pond Turtle in Catalonia.



Pictures from left to right and over up to down: recently born aquarium, European Pond Turtle individual, two different size individual European Pond Turtle, turtle breeding facilities, breeding pond, European Pond Turtle

## THE PROJECT LIFE POTAMO FAUNA

In the framework of the European LIFE Potamo Fauna "Conservation of river fauna of Community interest in the Natura 2000 network sites of the Ter, Fluvià and Muga river basins" which is a direct target species is the European Pond Turtle, some actions have been done.

### RELEASE

Population reinforcements with European Pond Turtle specimens bred in captivity have been done in Natura 2000 "banks of the Lower Ter" area. At least until the end of the project in 2017, 150 turtles will be released.



### SMALL MARSHES CREATION

To recover populations of this species and also others like the Mediterranean Turtles and amphibians, the project has improved their habitats, by creating 24 new ponds (less than 50 square meters and shallow-, less than one meter), in the the Ter and Llémena rivers.

### MONITORING

Another of the tasks that develop the project scientists are the monitoring of the turtles to check their habitat and their survival. All specimens released have been marked with a subcutaneous chip to be able to do radiotracking techniques.



### INVASIVE TURTLES CATCHING

During the project invasive turtles are being caught, to reduce the number of invasive exotic turtles. Annual campaigns are done, by placing traps and metal handles, especially in areas close to sites with *Emys* turtle release.

**More information about European Pond Turtle:**

- [www.tortugadestany.org](http://www.tortugadestany.org)
- [www.tortugues.cat](http://www.tortugues.cat)
- [biodiver.bio.ub.es/biocat/](http://biodiver.bio.ub.es/biocat/)

LIFE Potamo Fauna (LIFE12 NAT/ES/001091)

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1 January 2014 – 31 December 2017

Total cost and EU contribution:

TOTAL – 1.900.262,00 euros / UE – 949.981,00 euros



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