

## WHAT'S NEW AT SUDOANG?

SUDOANG is working to conserve the European eel and its habitat in the SUDOE area (south-west of Europe) by providing the managers with common tools and methods. Essentially, we are focusing on three objectives:

**1. Provide common management and assessment tools to strengthen the managers' capacity to make decisions based on greater scientific evidence.**

The project will assess the biomass of the eel, the mortality rate at the hydroelectric facilities, recruitment and exploitation rates at the glass eel fisheries. The first, and the most demanding, step to create those tools is to gather the available data for the SUDOE area.

With the help of our associate partners, representing the different authorities and NGOs, data have been compiled on eel fisheries, the abundance, environmental parameters and the location of the barriers to eel migration. The data have been integrated in a common "eel database".

Figure 1 shows some examples of the information gathered to determine eel numbers in the rivers.

The distance to the sea is estimated in **A)**, which is linked to eel numbers in the rivers.

**B)** shows the data on electric fishing sampling performed to estimate eel numbers. These figures allow us to establish the escapement rate of adult silver eels from the rivers to the sea at the time of their migration, as required by the Regulation (EC1100/2007).

In **C)**, the compiled map of barriers and turbines will allow us to establish which barriers prevent the eels from colonising the rivers and to estimate the mortality rate in the turbines. This information is useful to prioritise the barriers and the hydroelectric plants that must be eliminated.

Furthermore, we have compiled information on the characteristics of eel fishing and conducted scientific studies that will allow us to determine recruitment and exploitation in the SUDOE area.

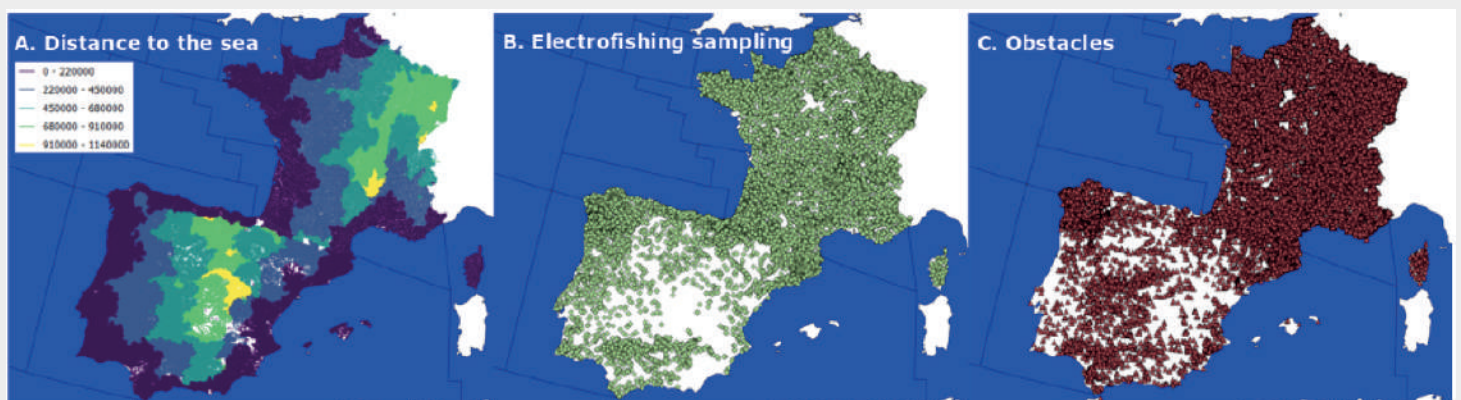


Figure 1. Spatial distribution in A) Distance to the sea, B) Electric fishing sampling and C) Barriers (a greater concentration of barriers means more available data, not necessarily more barriers).

## 2. Design a strategy to obtain data for coordinated and long-term monitoring.

In some river basins of the SUDOE area, there are gaps in knowledge about the species that hinders its assessment, handling and conservation. Furthermore, even if samples are taken, the lack of standardised and coordinated monitoring means that the results are not comparable and are more difficult to use. Therefore, a strategy needs to be designed that allows the key parameters to be collected in a standardised and coordinated way in order to monitor the eel in the SUDOE area, at a reasonable cost and ensuring monitoring in the long term.

In June 2018, a workshop was held in Anglet to agree the protocols to be used to take eel samples at different stages of its life cycle. The protocols will shortly be available in four languages (French, Spanish, Portuguese and English) on the [www.sudoang.eu](http://www.sudoang.eu) website. The sampling was conducted in all the river basins during the end of summer and autumn, with all the parties involved using the common protocols.



Photo 1: Measuring the diameter of an eel's eye.  
(Photo: Lluís Zamora)



Photo 2: Eel sampling in the River Guadiaro, Spain.  
(Photo: UCO)

## 3. Reinforce the cooperation between the stakeholders involved in eel management.

The complex biological cycle of the European eel and its wide distribution means that its management is carried out at different levels (for example, national, regional and local) and sectors (for example, governmental and public bodies, organisations involved in the protection of water and marine ecosystems, biodiversity conservation and ecological restoration, the scientific community, the industrial sector or the end users). Consequently, the management of the European eel is not concerted in the SUDOE area.

Therefore, dialogue, cooperation and capitalising on expertise and experience need to be improved. To achieve these objectives, two workshops were organised, one in Lisbon at the project launch meeting (Lisbon, May 2018) and the other in A Coruña, last November (2018).

In A Coruña, 28 people from Portugal, Spain and France, including fishermen, scientists, NGOs and administrations, were joined by Lonxanet, one of the partners, and specialist instructors. Guided discussions were held to begin to come together in a common purpose and embark on a dynamic of collaboration.

The workshop consisted of three sessions. **The first ("Voting with Your Feet")** gave the participants the opportunity to share their views on the project, their role in it and the impact of its success in their daily life.

**The second session ("Paired Interviews")** was focused on sharing professional values and motivations, along with what or who convinced them to take part in SUDOANG. The exercise emphasised what the participants had in common and how to align their vision of success.

**The third session ("Changes")** was focused on helping participants to develop a more holistic view of the project and to overcome the tendency to see it solely from the perspective of their professional position or function.

Participation was good and there were interaction, different expectations and perspectives, and opportunities to listen to other participants. Changes in attitudes and overcoming preconceived ideas do not occur overnight, but are rather a progressive process that will happen over time, hopefully in the framework of the SUDOANG project.

## LAST AND NEXT EVENTS

### KICK-OFF MEETING IN LISBON (30 May - 1 June 2018)



The members of the SUDOANG Consortium gathered in Lisbon, hosted by the Science Faculty at Lisbon Meeting, for the first annual meeting. The main beneficiaries and associate partners thus had the opportunity to meet in person, present the goals, tasks and results of the project and the work was planned for the following year.

### WORKSHOP AND TRAINING COURSE IN ANGLET (27-28 June)



Workshop and training course on eel sampling protocols and techniques at Anglet run by Agnes Bardonnnet (INRA) and Isabel Domingos (FCUL-Mare). Five sampling protocols were prepared for the recruits and eels (silver and yellow) and eel sampling will therefore be standardised in Sudoe area from now onwards. [The protocols will be available at www.sudoang.eu](http://www.sudoang.eu)



## LAST AND NEXT EVENTS

### WORKSHOP ON DATA COLLECTION AND ON TOOLS IN A CORUÑA (15-16 November 2018)



Workshop on data collection and sharing with the stakeholders and on tools to improve dialogue between the eel-related parties, organised by Lonxanet Foundation.

### ANUAL MEETING IN BORDEAUX (FRANCE) (19 June 2019)

We will meet from 19 to 21 June 2019 to share the progress made in SUDOANG and to plan the activities for the coming year. Save the date in your diary! We will be in contact and send you a detailed programme very soon.

Just before this meeting, a workshop on otolith reading will be held on June 17-18th 2019, organized by Françoise Daverat (Irstea) and Isabel Dominhos (FCUL-Mare).

## ABOUT THE CONSORTIUM

Another three associate partners have joined the SUDOANG Consortium: [Associação de Profissionais de Pesca do Rio Minho e do Mar \(APPRMM\)](#) and [Autoridade de Segurança Alimentar e Económica \(ASAE\)](#) from Portugal and the [Germarderie Nationale](#) from France.

Welcome aboard and we look forward to seeing you soon at the upcoming meeting!

We would like to thank [Alan Walker](#) (CEFAS) and [Willem Dekker](#) (Swedish University of Agricultural Sciences) for joining SUDOANG as external reviewers. As experts on eels and other diadromous fish, they will assess the progress of the project.

Welcome onboard as well!

## LEGISLATIVE AND SCIENTIFIC NEWS OF INTEREST

### **Review of Eel Management Plan**

In 2018, two workshops were held in July and November, during which the national reports on the application of the eel management plans were reviewed and the biomass and mortality estimations were extracted and collated. However, mortality estimations could not be provided to reflect the general impact status in Europe.

For further information, please click on [this link](#) to read the report in full.

## INTERESTING SCIENTIFIC AND LEGISLATION UPDATES

### Joint EIFAAC/ICES/GFCM working group on eels (WGEEL).

In September 2018, leading eel experts who cover North Atlantic, North Sea, Baltic, Mediterranean and North Africa areas met in Gdansk (Poland). They reported on the [status of European eel populations](#) and provided [advice](#) to support the development and implementation of Regulation (EC) No. 1100/2007 establishing measures for the recovery of the stock of the European eel.

The advice establishes that all anthropogenic mortalities, including recreational and commercial fishing, should be reduced to zero or kept as near as possible to zero. The SUDOANG “ambassadors” of France, Spain and Portugal attended the meeting.

### Fishing opportunities

[European Council Regulation 2019/124](#), of 30 January 2019, stated that a consecutive three month closure period for all fisheries of European eel at all life stages should be established. In the case of the Mediterranean, the period during which fishery must be closed is free, while in the Atlantic it must be between 1 August 2019 and 29 February 2020.

