Public Perceptions & Citizen Participation

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Citizen Science Programme

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WORLD FISH MIGRATION
FOUNDATION

AMBER

Why?

Reconnecting European rivers, the smart way

LET IT FLOW

DATA

Need of data for the Atlas of Barriers in European Rivers

AWARENESS

Consciousness of fragmentation

DISSEMINATION

Involving citizens helps to spread the message

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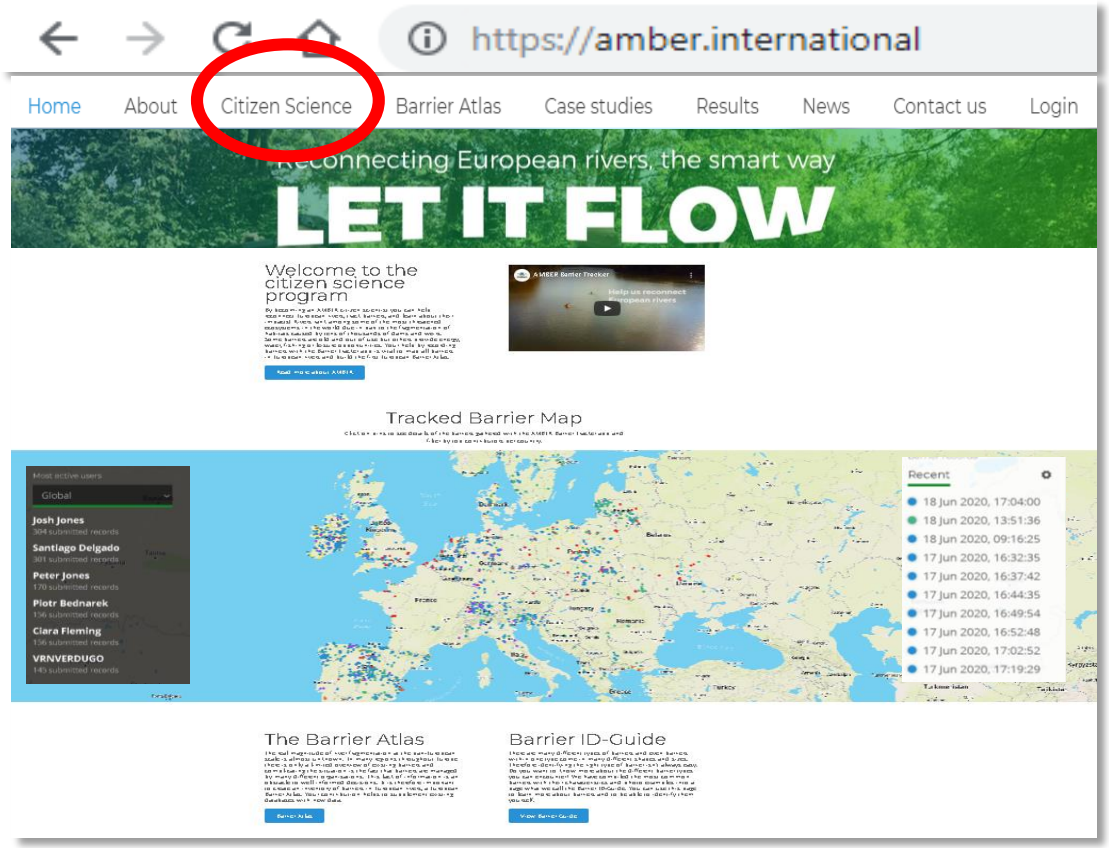
What?

CITIZEN SCIENCE PROGRAM:
BARRIER TRACKER + PORTAL + CAMPAIGNS



BARRIER TRACKER

Barrier Tracker 4+
Natural Apptitude
Free

GET IT ON Google Play

Download on the App Store

- **10 languages:** Dutch, English, French, German, Italian, Polish, Portuguese, Spanish, Slovenian and Ukrainian. Next: Norway?
- **Your data is downloadable**… but remember to register!
- Visualize **App recorded barriers** and the **Atlas data**
- Visualize different backgrounds: Streets, satellite, hybrid

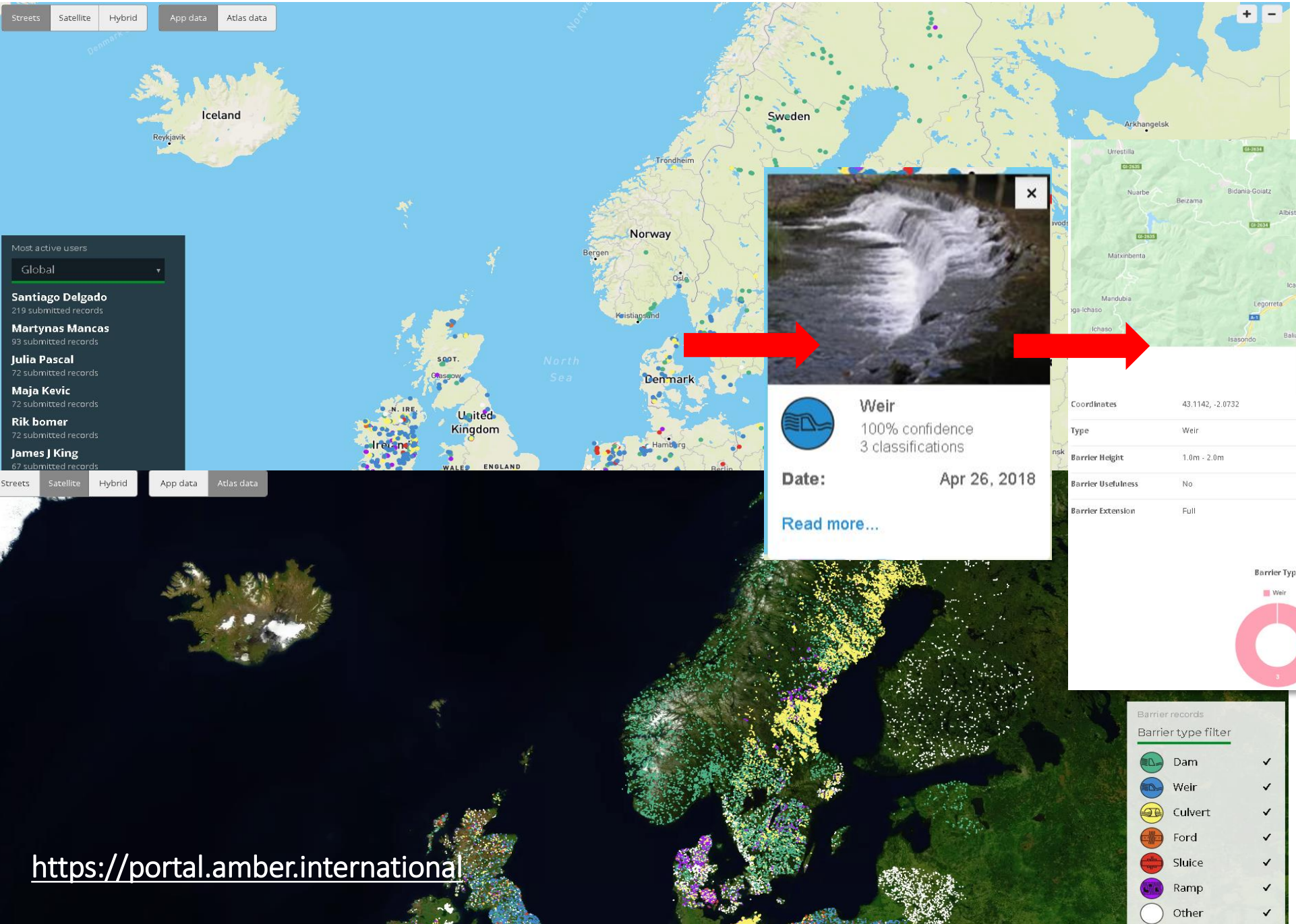
66% 11:14

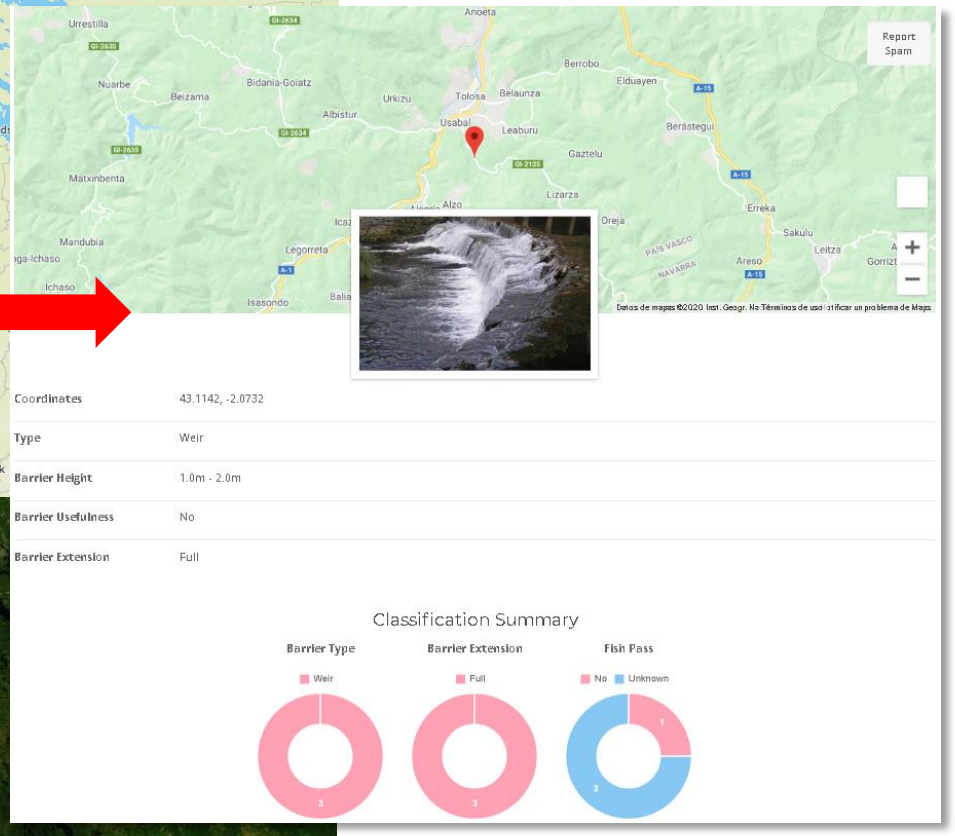
AMBER

LET IT FLOW

Tracked Barrier Map

PORTAL





https://portal.amber.international

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PORTAL

The Barrier Atlas

The real magnitude of river fragmentation at the pan-European scale is almost unknown. In many regions throughout Europe there is only a limited overview of existing barriers and complicating the situation is the fact that barriers are managed by many different organisations. This lack of information is an obstacle to well informed decisions. It is therefore important to create an inventory of barriers in European rivers, a European Barrier Atlas. Your contribution helps to supplement existing databases with new data.

Barrier Atlas

Barrier ID-Guide

There are many different types of barriers and even barriers within one type come in many different shapes and sizes. Therefore identifying the right type of barrier isn't always easy. Do you want to know more about the different barrier types you can encounter? We have compiled the most common barriers with their characteristics and photo examples into a page what we call the Barrier ID-Guide. You can use this page to learn more about barriers and to be able to identify them yourself.

View Barrier Guide

Table 1. Key parameters that we propose to be compiled f

Key parameters	Definition
ATLAS_ID	New ID defined within AMBER
Source_ID	ID of the source (national, regional) d
URL	Link to data source. It can be, e.g.: t the owner institution, the available we national/regional DB
Country	EU country or EU area, e.g. Balkans, Dan
X_coord	Latitude
Y_coord	Longitude
River	Name of the river
Basin	Name of river basin
Height	Barrier height (m), i.e. the vertical dis lowest point on the crest of the barrier point in the original streambed
Type	Dam, weir, spillway, etc.
Year	Date of building (end)

Dam

A dam is a barrier that blocks or constrains the flow of water ises the water level, forming a reservoir.

Dams come in many shapes and sizes. Dams are often used generation of electricity the supply of water.

Weir

A weir is a barrier aimed at regulating flow conditions and water levels or at intercepting sediment or at reducing the channel slope for stabilizing the channel bed of a river or stream. Water often flows freely over the top of a weir.

Weirs come in many shapes and sizes but often have a height of less than 5 meters.

Culvert

A culvert is a structure which allows a stream or river to flow through/under an obstruction.

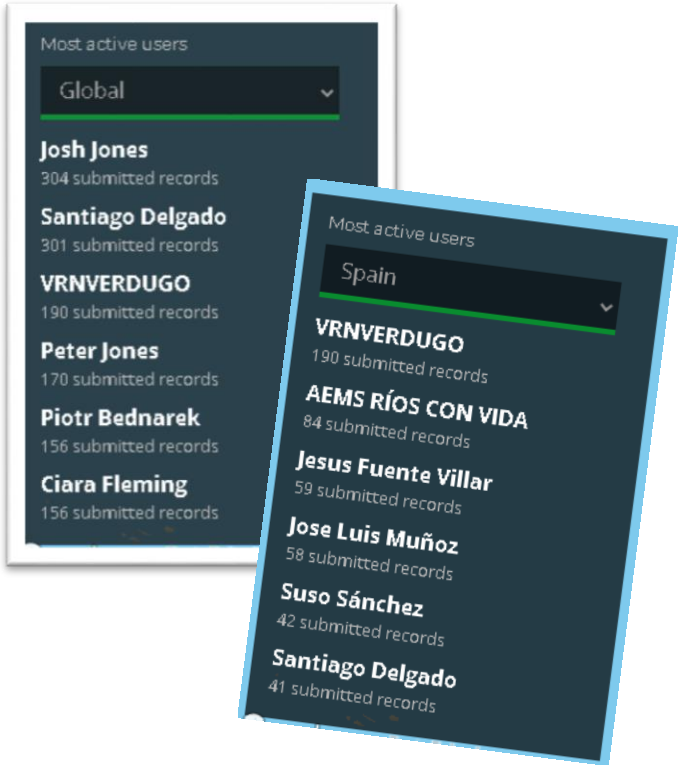
Culverts are often embedded in soil and come in many shapes and sizes, varying from round and elliptical to box-shaped.

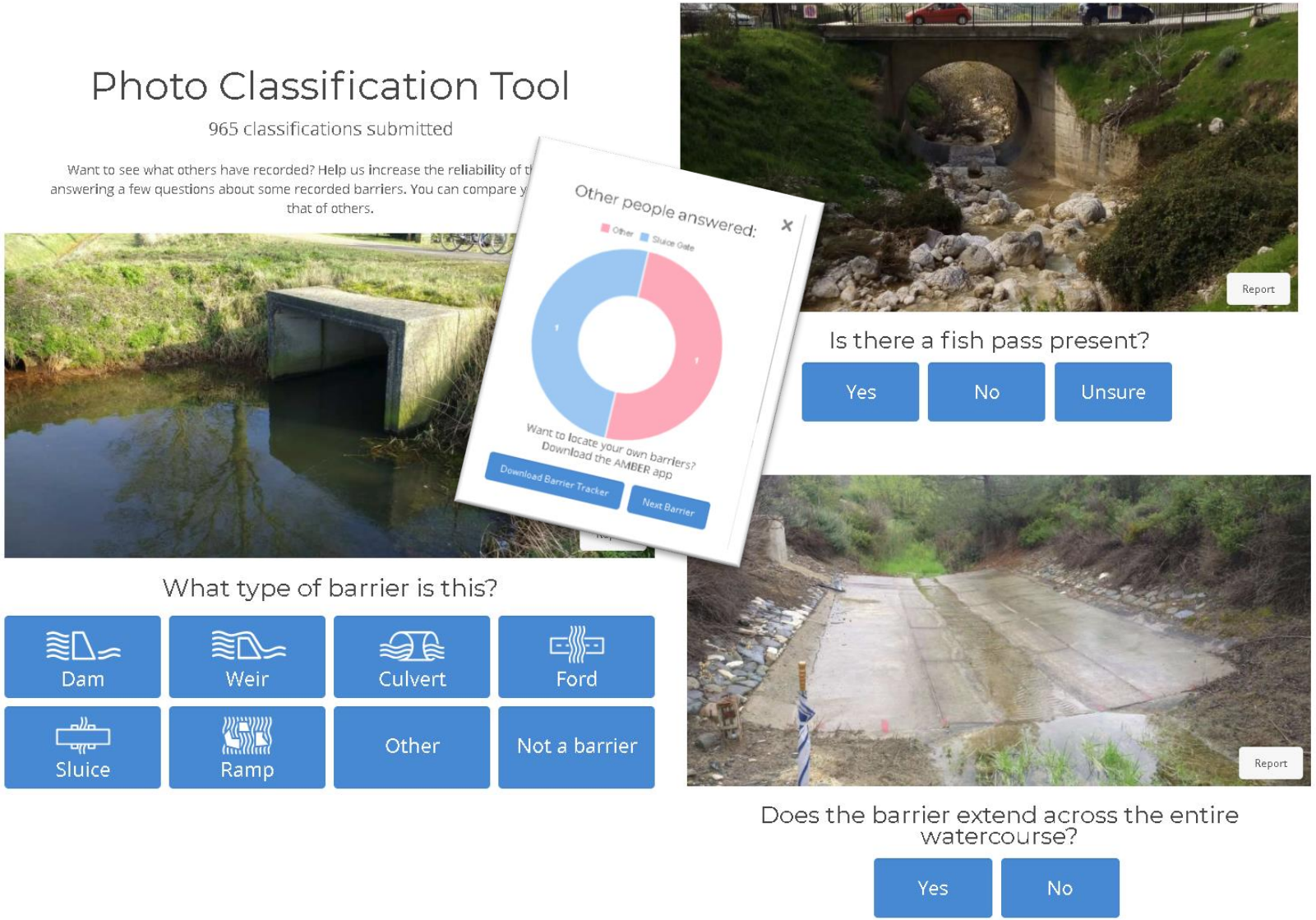
Ford

A ford is a structure in a river or stream which creates a shallow place for crossing by vehicle or on foot.

PORTAL

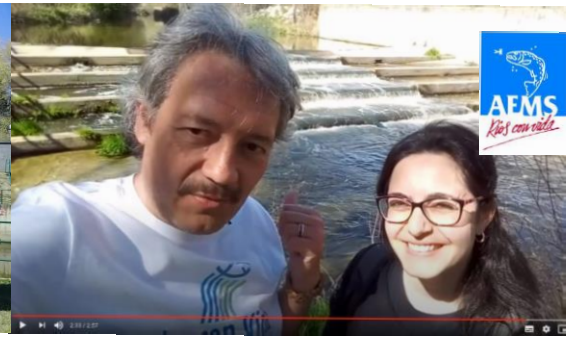
Most active users global and per country





AWARENESS AND ENGAGING CAMPAIGN

- Promo material: videos, flyers
- Presentations in workshops, conferences, festivals, etc.
- Courses and training sessions at universities,
- Awareness events
- Synergies with other projects
- Media: TV, radio
- Publications
- Social media
- Newsletters
- Emails

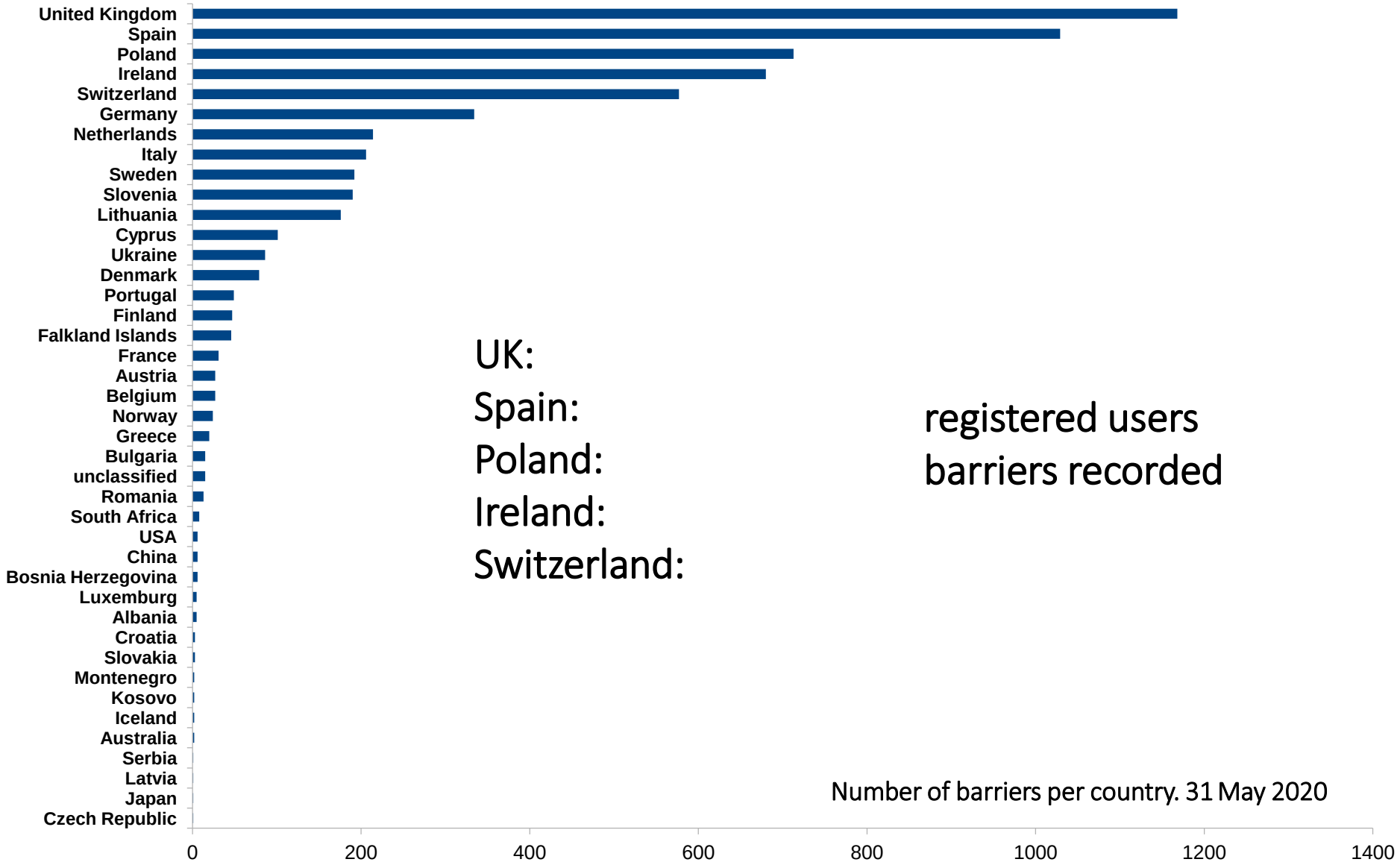


Results

RESULTS

AMBER Citizen Science Program launched April 2018

May 2020:



UK:

Spain:

Poland:

Ireland:

Switzerland:

registered users

barriers recorded

Validation (%)

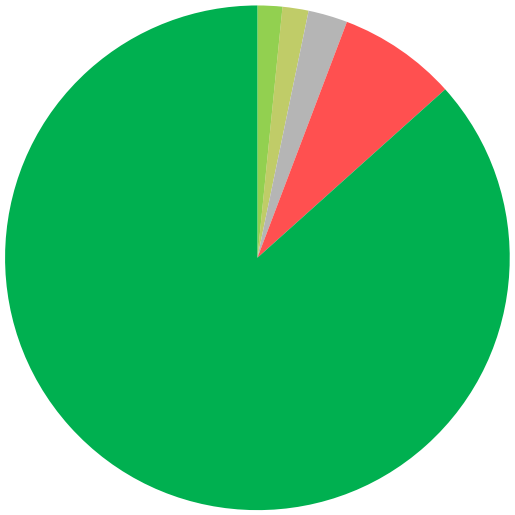
Correct

Incorrect

Plausible

Unlikely

Likely



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RESULTS

Barrier type : Most records correspond to small barriers.

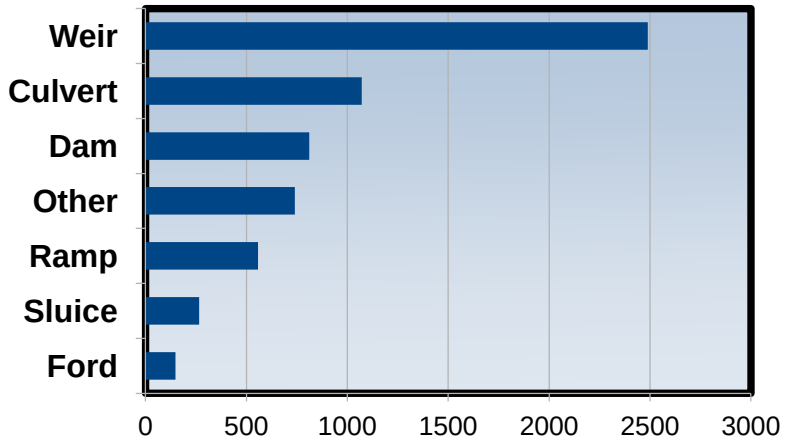
Barrier height: 70% < 2m; 86 % < 5m ⇨ Same results as the Barrier Atlas

Barrier in useful conditions: 13,7% of the barriers are not in use

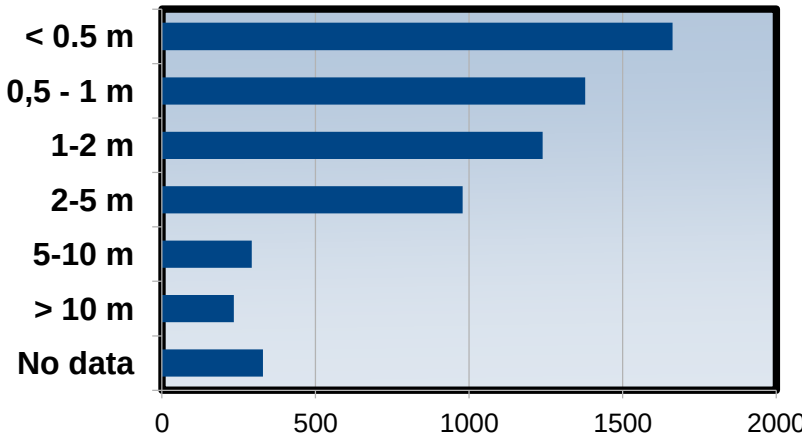
Type
Weir
Culvert
Dam
Other
Ramp
Sluice
Ford

Height
< 0.5 m
0,5 - 1 m
1-2 m
2-5 m
5-10 m
> 10 m
No data

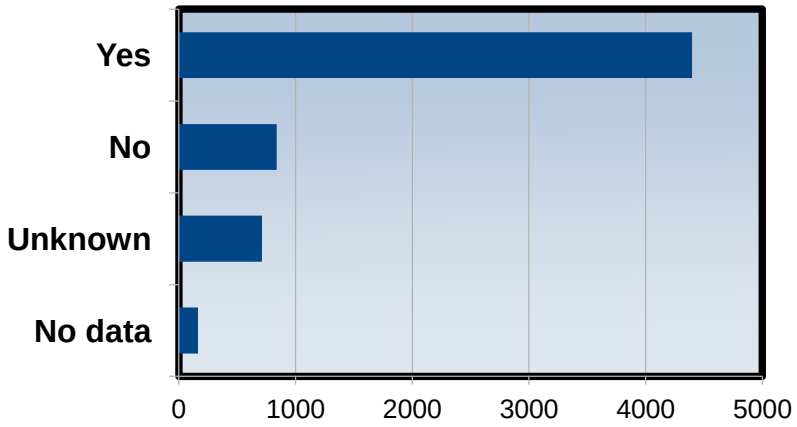
Usefulness
Yes
No
Unknown
No data



Barrier type. 31 May 2020



Height. 31 May 2020



Usefulness. 31 May 2020

Legacy

https://amber.international/event/summer-camp/

15 July 2020.
10:00-11:30 EC Time

Tracking barriers by citizens and professionals

LESSONS LEARNED

- First step: Why, what, how, when
- Promotion and engagement of the users
- Keep it simple
- Powerful tool to collect data, to increase awareness and to disseminate
- Make a good use of the data

Thank you!

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