

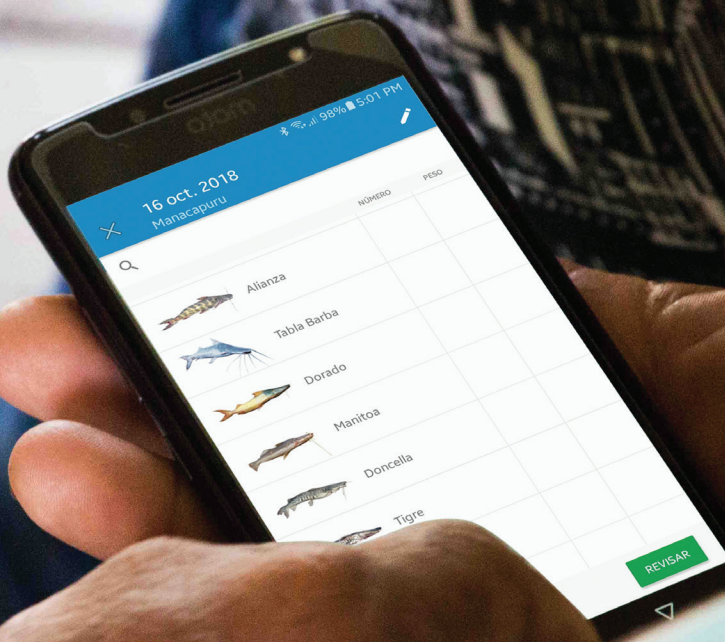


# Ictio

www.ictio.org

The app to track fish observations  
in the Amazon Basin

Photo: Vanessa Eyng - Instituto Mamirauá



## Revealing fish migration patterns in the Amazon Basin

**Ictio is a database and a mobile device app created to register observations of caught fish in the Amazon Basin.** It was developed as part of the Citizen Science for the Amazon project, which aims to connect citizens in the collection and sharing of information on the most important Amazonian fish species. Its wider objective is for that information to contribute in understanding Amazonian fish migration.

**The result will be a migratory fish open database at Amazon Basin scale, put together through the collaboration** of local and indigenous populations, individual fishers, management groups, fishing associations, citizens and scientists. The database will also compile historic monitoring data at local scales from existing datasets. With all this information, we will deepen the understanding on migration in priority fish species in the Amazon, with the intention to contribute to

sustainable fisheries and to the conservation of priority aquatic ecosystems.

Users—citizen scientists— will be able to access and share all of their data, allowing them to keep track of their catch over time for different species over time.

### With Ictio you can record:

- ▶ Species
- ▶ Number of Individuals
- ▶ Total Weight
- ▶ Market Price
- ▶ Location
- ▶ Date
- ▶ Photographs

This app is available for download in Android mobile devices and does not require an Internet connection to work.

# Fish migration: a research and management challenge throughout the Amazon Basin

**Migratory fish connect people with the ecosystem: they are one of the main sources of food and income for the rural and urban populations of the Amazon and they have an important role in the connectivity of rivers and their ecosystem processes, at multiple scales.** Their sustainable management is essential for the conservation of the Amazon and the well-being of its people.

However, there are three great challenges: First, monitoring activities and participatory management of natural resources usually have a local reach and do not connect with each other. Second, local populations, particularly indigenous groups,

are often marginalized in the decision-making processes that affect their lives. Third, the size of the Amazon Basin and its high transportation costs make it difficult to collect data, manage the basin at an appropriate scale, and conduct scientific investigations.

**The Citizen Science for the Amazon project presents a solution to this triple challenge: A network of organizations and people that generate information on fish and waters at the basin scale, built by using a participative approach and innovative and low-cost technologies.**



Download the app in Google Play or at [www.ictio.org](http://www.ictio.org)

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Learn more about Citizen Science for the Amazon: [www.AmazonCitizenScience.org](http://www.AmazonCitizenScience.org)

## Why Ictio?

**The project seeks to understand how fish migrations work in the Amazon and what environmental factors influence them.** The citizen science approach allows us to address information gaps for conservation in the Amazon, drastically reduces the cost of collecting this information, and empowers citizens to actively contribute to the sustainable management of fisheries and the conservation of flood forests.

Local populations, especially people who fish, will benefit from access to information to monitor their fishing activities, and be able to improve management of the fisheries and aquatic ecosystems on which they depend. The scientific community can use the data generated to expand existing knowledge about the ecology of fish and Amazonian water systems.

Civil society organizations may use it for conservation or sustainable management actions, by informing decisions and policy at multiple scales. The general public can also get involved, raising awareness, interest, and commitment in these matters.

Ideally, the information generated can also be used directly by decision-makers to complement their own data and improve governance and policies on fisheries resources, water quality, infrastructure development, and watershed management.

