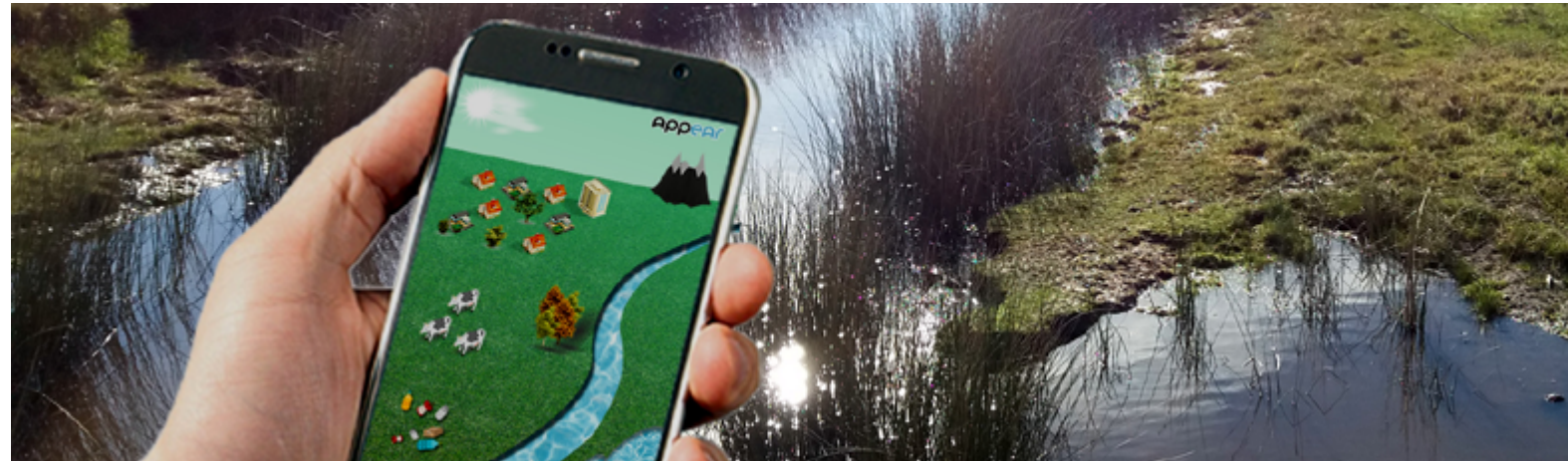




AppEAR

Environmental monitoring of freshwater ecosystems



Objectives

Overall goal: Study freshwater environments (rivers, lakes, lagoons and estuaries) both for scientific and educational purposes.

Specific goals: The scientific purpose is to analyze the condition of inland water ecosystems using citizen participation strategies. Particularly, the project aims to: identify the environmental factors that positively and negatively impact freshwater ecosystems; generate new tools for monitoring such ecosystems; and calibrate existing tools for assessment.

Besides, the educational purpose is to create materials related to the preservation of freshwater ecosystems. To achieve such purpose, the project aims at: drawing up simple manuals for monitoring said ecosystems to be used in educational activities; making available to educational institutions maps showing the condition of courses of freshwater; and educating on scientific reasoning, by directly involving citizen scientists in some or all stages of the scientific method.

Description of citizen participation

Citizen scientists assess habitat condition in aquatic environments by using an app for Android or a website. The information sent is concentrated in the AppEAR database and used to create a real-time map showing aquatic habitat conditions, both of which may be freely accessed.

Also, citizen scientists are able to learn about the aquatic environments present in their communities and educate others using the educational resources generated by themselves. People interaction and active involvement in discussion forums are useful to measure habitat quality in aquatic environments, to learn how to generate educational resources for these ecosystems, and even to improve AppEAR.

Type of citizen science project

Contributory project. It is designed by scientists, and citizens participate in data collection.

Participating parties.

Researchers of the National Scientific and Technical Research Council (CONICET, in Spanish) / National University of La Plata (UNLP, in Spanish)

Status. In progress.

Time frame. 06/01/2016 – N/A

Frequency of project execution. Uninterruptedly.

Participation period. On a sustained basis.

Scope of the initiative. Argentina (two or more provinces).

Geographic scope. Argentina.

Project development members. It has been entirely developed by people with formal scientific training.

Number of participants. Over 1001.

Action/s involving citizen participation

- Data collection.
- Phenomenon monitoring.

Technological device/tool required.

- Mobile device or PC
- Digital camera
- App for Android
- Internet access

Recruitment methods. Through social media, the project website and by making direct contact with schools and organizations.

Replicability. “PreserVamos” project, with UNDP Accelerator Lab’s support.

Scalability. “PreserVamos” project, with UNDP Accelerator Lab’s support.

Open access to data. Both the code and the validated reports may be freely accessed.

Feedback. Feedback on reports is provided via e-mail and/or push notification through social media.

Linkage with state agency/government. Meetings have been held with the state agencies and local governments interested in the project.

Institutional funds. Project’s own funding sources.

Awards/distinctions. “Ciencia, Tecnología e Innovación 2017” (“Science, Technology and Innovation 2017”) award granted by the Scientific Research Commission of the province of Buenos Aires.



Knowledge areas/disciplines (OECD)

NATURAL SCIENCES / Earth and related Environmental sciences
NATURAL SCIENCES / Biological sciences

Project leaders.

Joaquín Cochero. National Council for Scientific and Technical Research (CONICET in Spanish).

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