Fighting for survival: THE MIGRANTS

Ages 12 to 18.

Along European rivers, migratory aquatic species struggle to go back to their spawning grounds to lay their eggs and thus reproduce. Rivers throughout Europe are fragmented by barriers to migration e.g. weirs and dams. These impede certain aquatic species, such as the Atlantic Salmon, in completing their life cycle successfully. Migratory bird species can also be affected by other types of barriers. For example, tall noisy windmills or the busy air space around airports can inhibit bird migration. It is important for society to know which migratory species inhabit catchments throughout Europe, how to identify those species, where they spawn, and what their relationship is with the rest of the ecosystem. If young Europeans can explain this in their own words to adults, it will raise the awareness, and adults will come to understand the importance of preserving and reconnecting European rivers.

School activity on local fish and birds – tested with children of Primary Education

Pior contact with teachers should be made to discuss the best way to introduce the importance of habitat connectivity to the target age class. Game activities like this are appreciated by students of all ages, so the proposal should be well accepted. With a teacher's help, the story of barriers to migrant species can be explained to the students, highlighting some examples based on nearby rivers: how barriers affect fish populations that cannot migrate upstream, and how other species from our catchments, like birds, can fly over those river barriers but may find different barriers as well. The aim of this activity is to locate fish and bird species upstream and downstream of a river barrier and to study their taxonomic, morphological and ecological characteristics.

Instructions

Participants in this activity will be organized into small teams, from two to six people. At least one member from each team will have a smartphone or digital camera with geo-referencing capability. A visit to the closest dam will be organized from the school. Each team will look for fish and bird species upstream and downstream. They will take photos and videos over a variable period (from one day to several weeks, depending on school's schedule and possibilities).

Once the participants are satisfied with their collection of photographs and videos, each team will identify the observed species. They will inquire about their taxonomy: scientific, common, and local (if any) name; identify their main morphological and ecological characteristics (what they do eat, when they do migrate, where they do nest…). They will use field guidebooks, reliable websites, mobile applications or whatsoever resource they need.

All information and material collected may be presented as posters about local fish and bird species. Each poster contains the photographs taken by participants and maps with its geolocation. These posters will be a good tool for teaching/learning about fluvial ecosystems and for discussing barriers. The posters can be introduced to local community through online social networking and public exhibitions in educational and cultural centers. Students can explain how to take photographs of local species and how to identify them in face-to-face or online meetings, encouraging people to do the same wherever they are.

Let's play doing research!

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