

EGU21-9790

<https://doi.org/10.5194/egusphere-egu21-9790>

EGU General Assembly 2021

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The Home River Bioblitz: A World-Wide Collaboration Between Citizens to Show the Importance of Free-Flowing Rivers

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One challenge in collaborating with citizen scientists is to keep them motivated to continuously collect data in the long-term. The Home River Bioblitz event overcomes this roadblock by engaging hundreds of citizens around the world in one single day. In general, a bioblitz is a communal citizen-science effort to record a wide variety of species at a specific location within a certain timeframe. This single-day commitment enables large-spatial resolution data to be collected. The Home River Bioblitz was created by the River Collective, National Geographic, Bestias del sur Salvaje, and iNaturalist as part of the citizen science program supported by the National Geographic Society. The first event took place on September 20th, 2020 on 43 rivers located in 24 countries around the world. Over 500 participants from five continents used the iNaturalist app to log 5245 observations and 1772 species of flora and fauna, with at least 14 species under IUCN status, contributing to the Global Biodiversity Information Facility repository. This method of low-temporal and high-spatial data collection is used to identify new species, IUCN red list species, local endemic species, and invasive species. Not only does this event engage citizen-scientists to contribute to biodiversity findings, but it also connects people to their local environments by having them zoom into details they normally pass by. By celebrating the diversity of rivers and meeting the people around them, we were able to bring communities closer to knowing the species of their local rivers and raise awareness about the importance of free-flowing and healthy rivers around the world. An online post-event was dedicated to sharing these local river species and the scientific impact of certain observations with the participants. This event also opens up the possibility to collect other types of short term, large-spatial data around river ecosystems. In the next edition of the Home River Bioblitz, we would like to encourage the participants to collect hydro-morphological and water quality data by using open-access and low-cost citizen science tools, such as the Discharge app and the Waterrangers kit. The Home River Bioblitz event will not only be used to engage and educate participants on their local rivers, but the biodiversity and potentially chemico-physical and hydro-morphological data that will be collected could serve to develop time-series to help assess temporal variations and stressors.

