## ENGAGING CITIZEN SCIENCE CONFERENCE 2022

The Engaging Citizen Science Conference 2022 was held at the Aarhus University on April 25-26, 2022. It was organized by the Danish Citizen science network with support from Aarhus and Aalborg Universities and Novo Nordisk Fonden. They offered 10 travel grants for younger researchers, Ph.D. students, and postdocs, thus, the application was submitted in early February and after sending a summary of the study "Evaluation of the role of citizen science in nature conservation" the acceptance for the grant was gotten.

The purpose of the conference was to promote knowledge sharing among the citizen science (CS) community. After two years of pandemic restrictions, it was the first time to hold a big event in the field that brought together again CS project managers, experts, and young researchers to encounter in person to exchange ideas, to show study results, to create new networks, to share CS developments, innovations and new challenges. The conference included dynamic events such as workshop sessions, dialogue round tables, posters, demos, and Citizen Science Speed-dating. This last session had an interesting concept, talking with random participants for four minutes to share the reason why they are attending the conference and their interests in CS, and then everyone switched just like a speed-dating event.

It was a great opportunity to have a quick chat with representatives in the area of CS from different fields. Heidi Ballard, founder and faculty director of the Center for Community and Citizen Science at UC Davis in California, was one of the keynote speakers. Elke Francois leads CS projects on sustainable mobility at Mobiel 21 (Belgium). The Danish journalist, Frits Ahlefeldt captured his perceptions of the event with watercolor drawings. Quoting his words: "During my career I've been in many scientific conferences and today in Aarhus it is the first time I am experiencing the feeling of open sharing knowledge from scientists and participants for benefit of all".

This two full day conference was attended by over 250 participants who agreed that this exchange was needed. The conference started and finished with two master talks. On the one hand, Heidi Ballard (UC Davis) who shared her work entitled "Engagement and Learning through Community and Citizen Science ". She has been working in environmental education that integrates together communities, science and environment. From her own work examples, she emphasized that CS has the potential to answer scientific questions and address environmental problems but she detected the need of exploring other overlooked CS outcomes e.g., the potential of social learning, distributed knowledge gaining skills and community level effects.

Besides, her main learned lesson from her CS for conservation projects is to integrate participants and communities in more stages of the research process if it is possible since the beginning so they feel higher engagement and influence on study and project design and therefore, projects will have better outcomes and more active and greater engagement. On the other hand, Dick Kasperowski (Gothenburg University) presented a Sweden analysis of CS programs related to nature conservation from another point of view, where democracy, inequalities, and gender relations were the point of debate. He suggested taking more responsibility for the CS project design to avoid undemocracy.

After the main talks, the side events started. They had a rich variety of CS topics from health, CS in ecology and environment, food science, cultural heritage, engagement and communication, ethics, education, platforms for CS, new technologies, and others.



*Figure 1.* Some areas of citizen science (Ahlefeldt F.)

Several successful examples of CS project related to nature conservation and ecology were introduced. Ida Theilade (University of Copenhagen) and her research team, are working in Cambodia together with indigenous communities to preserve the nature from ancestral lands. They launched a simple app suitable for non-educated people to report forest crimes and forest resources. So far, the data has been used to assess hotspots of deforestation, document the importance of the forest to local livelihoods, promote wildlife protection and is a source of information for monitoring used by the Integrated Forest Observatory System (IFOROS).

The Danish projects "Vores Nature" (Our Nature) and the initiative called "Denmark Udforsker" (Denmark Explores) were presented in honor of 2020 the year of nature in the country. Their idea was to attract citizens to experience the benefits of nature; both on screen and out in nature, in order to reconnect them. Both carried successful outcomes since they got a multistakeholder participation, people from different ages and experiences levels.



Figure 2. Using phones to stop illegal logging (Ahlefeldt F.)

During all the events participants could see in practice how CS project leaders promote engagement, knowledge sharing, meanwhile, all learn from each other. The workshops and demos gave the opportunity the explore different methodologies and concepts to strengthen the field of citizen science.

More information about this experience will be published on the open-access portal Proceedings of Science (PoS), where authors were invited to submit their full-length papers, whose reports should include results and ideas obtained before or during the conference.

The Engaging Citizen Science conference perfectly enclosed the multidimensional character of CS and represented a starting point for answering the challenges that most of the sessions boarded. Such challenges are the need for more collaborative CS projects, improvement of CS initiatives where each audience has a particular design, and the requirement of official frameworks from international institutions to make CS more scientifically accepted.

This kind of event contributes to scaling up the impacts of CS. Furthermore, during the conference the invitation for the next big happening of the year on CS was promoted. It is the international ECSA Conference 2022 entitled "Citizen Science for Planetary Health" from the 5th-8th October 2022 that will take place in Berlin. It will be held by the European Citizen Science Association ECSA which was a key contributor for the Engaging Citizen Science Conference 2022 as well.

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