

## How to make citizen science blossom: Algae sightings in Finland

Matti Lindholm, Finnish Environment Institute (Syke)



## **Connection to the HELCOM Baltic Sea Action Plan (BSAP)**

#### Segment

Horizontal topics: Knowledge exchange and awareness raising



#### **BSAP Actions**

• HT27 Increase knowledge exchange and awareness raising to promote public and stakeholder support and interest in under-standing the state of the Baltic Sea and threats to its environment as well as promote opportunities for the general public to participate in citizen science.



## (cyanobacteria)

## Finnish algal bloom monitoring since 1998



No algae



Some algae



**Abundant with algae** 



Very abundant with algae



# From observations to an assessment

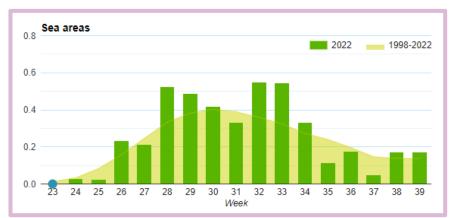
## **Site-specific development**



## **Weekly maps**



## **Algal barometer**







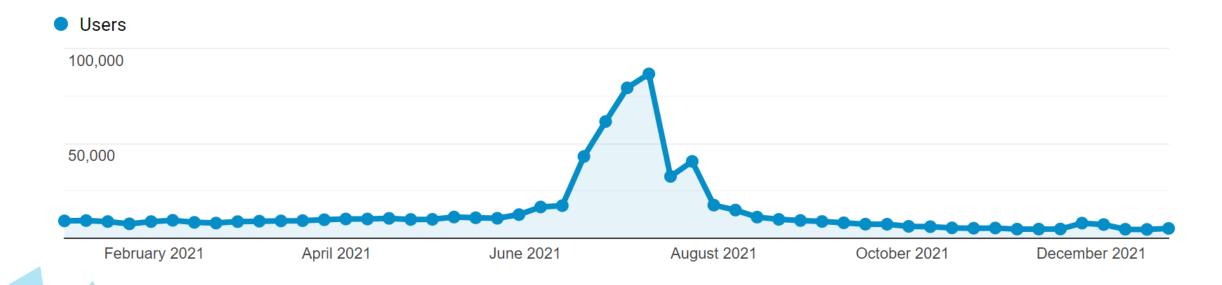
## A wiki service for citizen observations

- A page for each lake and coastal water body in Finland
- Anyone can edit the introdoctory text of a water body
- All users can set up their own observation sites
- Observations on blue-green algae, water level, water temperature, nutrient concentrations, secchi depth and many others can be uploaded to each site





# Lake-seawiki is popular during summer





## **CHALLENGES TO OVERCOME**

## Very few contribute

For large Wikipedias active contributors make up only

0.2-0.3%

of all visitors

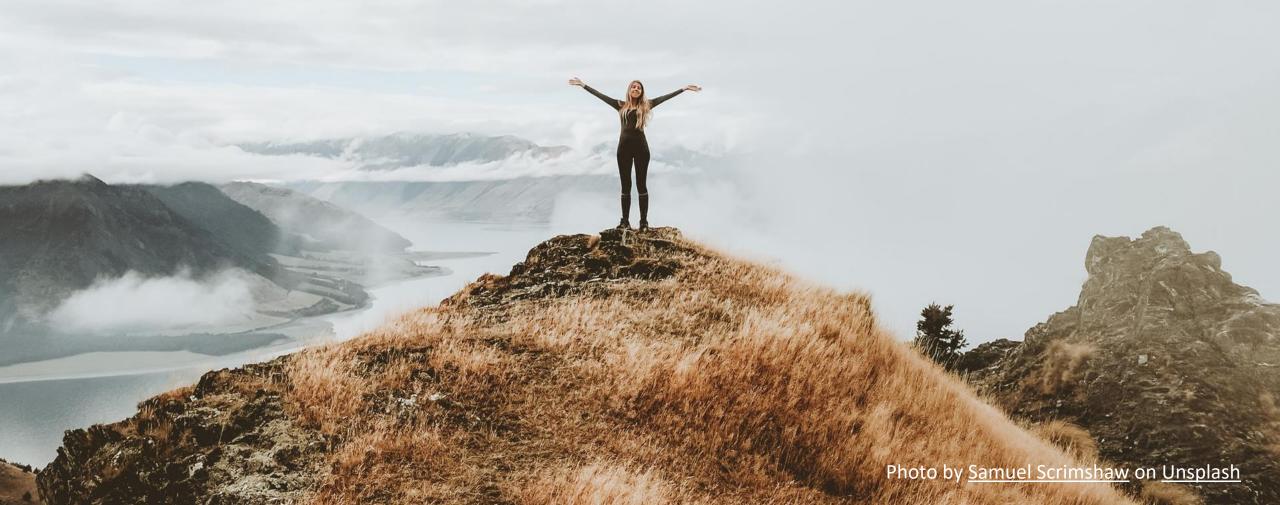
Source: Wikimedia users



Photo by Jake Weirick on Unsplash

#### **CHALLENGES TO OVERCOME**

It is relatively easy to get someone to participate once. The real trick is to have the same person collaborating again and again.

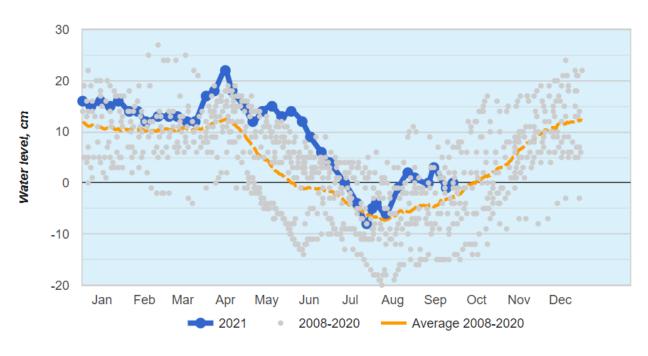




## **LAKE-SEAWIKI USER PERSONA**

## The desk drawer observer

1,750 citizen observations on lake Valkjärvi.



#### Motivational factors:

- Learning
- Sense of control
- Accomplishment





180 new weekly observations sites to the algal bloom monitoring campaign by the Finnish rotarians





### **ALWAYS ROOM FOR IMPROVEMENT**

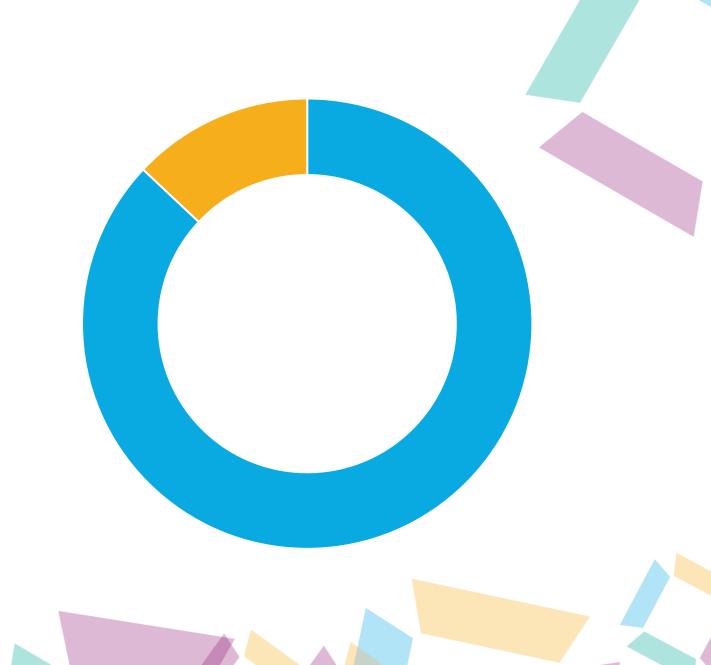
## **Equality is not evident**

In Wikipedia only

13 %

of the contributors are women.

Source: Wikipedians





# Thank you!