



How to make citizen science blossom: Algae sightings in Finland

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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



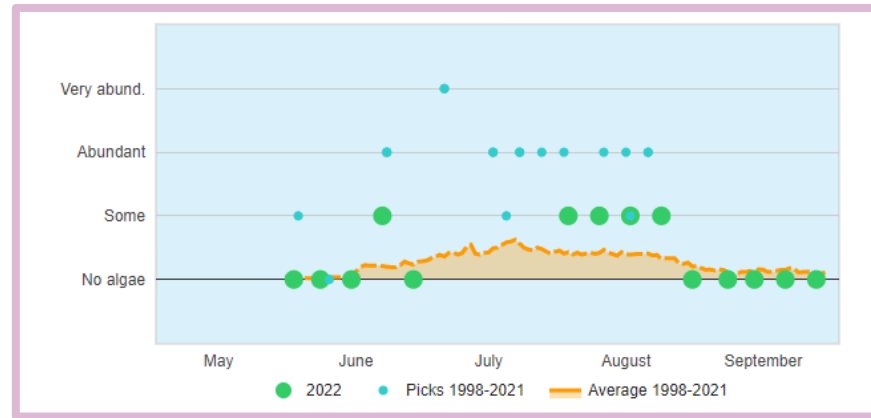
Abundant with algae



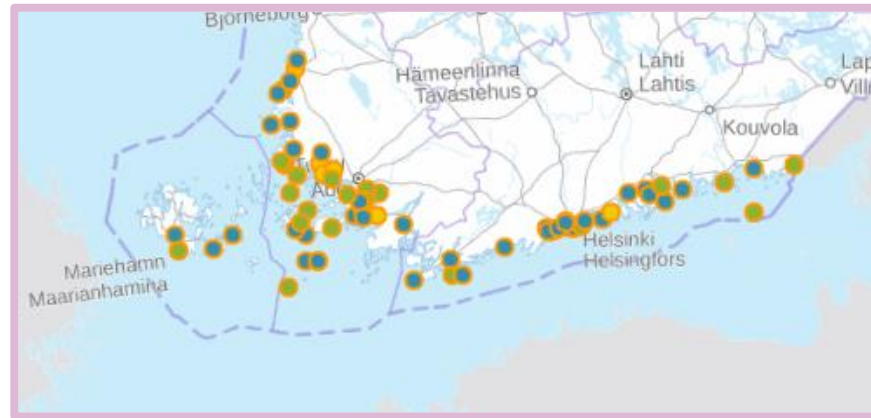
Very abundant
with algae

From observations to an assessment

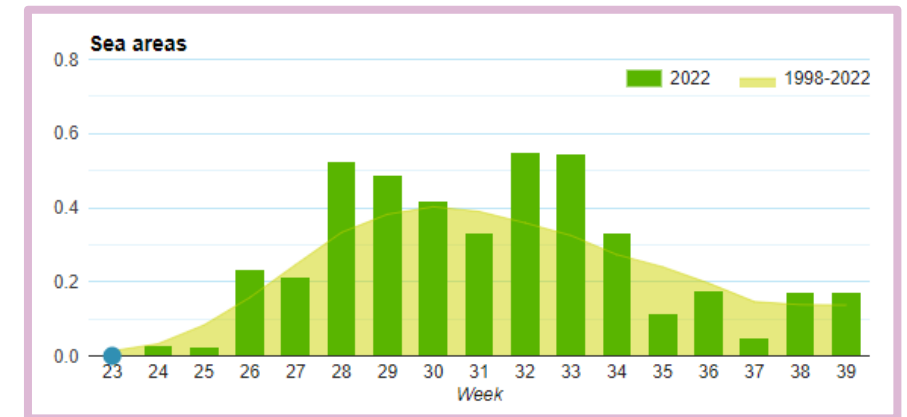
Site-specific development



Weekly maps



Algal barometer



A photograph of a person's legs sticking out of a wading pool. The water is a murky, yellowish-brown color. Several fish are visible in the water, including a yellow perch on the left, a striped bass in the center, and a flatfish on the right. The person's legs are wearing light-colored shorts. The scene is set outdoors, and the water appears to be quite shallow.

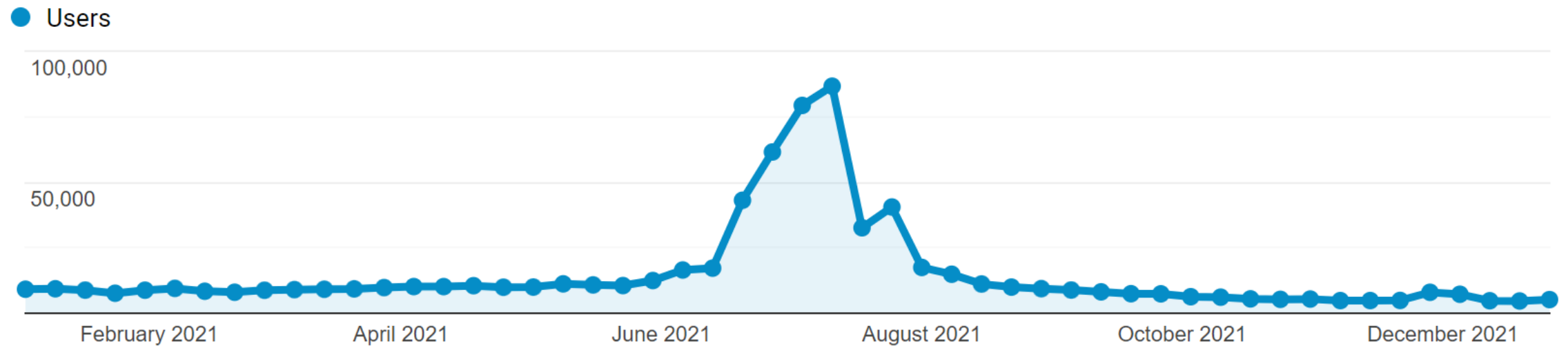
*A connoisseur is someone
who has soaked his toe in it.*

A wiki service for citizen observations

- A page for each lake and coastal water body in Finland
- Anyone can edit the introductory 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.

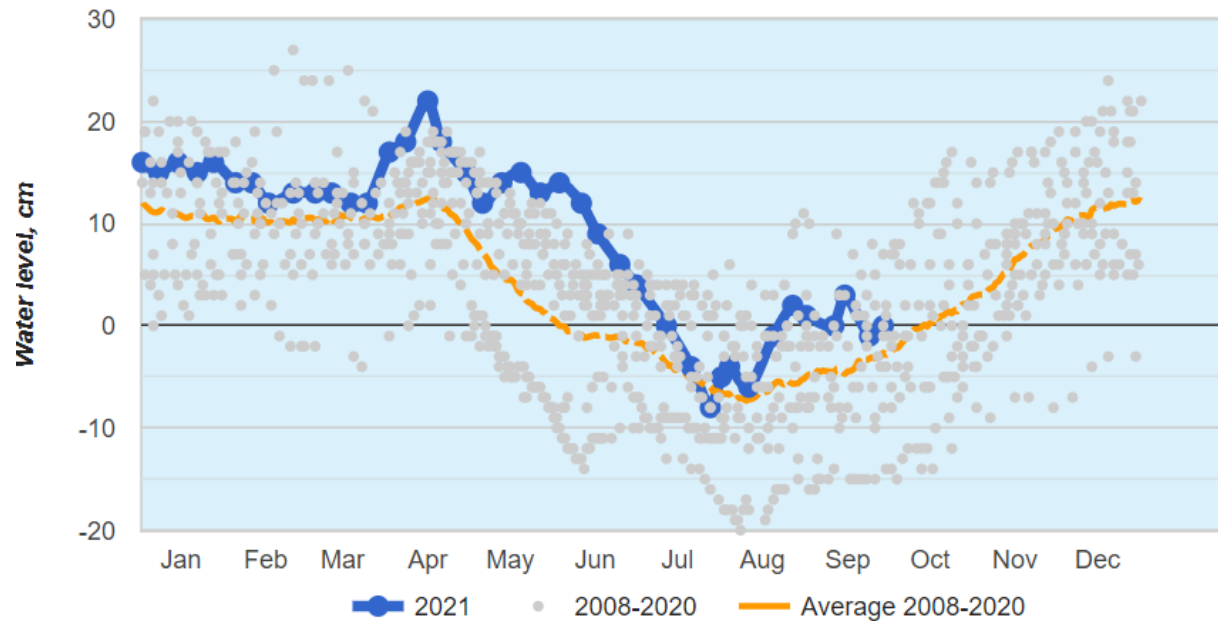


Photo by [Samuel Scrimshaw](#) on [Unsplash](#)

LAKE-SEAWIKI USER PERSONA

The desk drawer observer

1,750
citizen obser-
vations on
lake Valkjärvi.



Motivational factors:

- Learning
- Sense of control
- Accomplishment

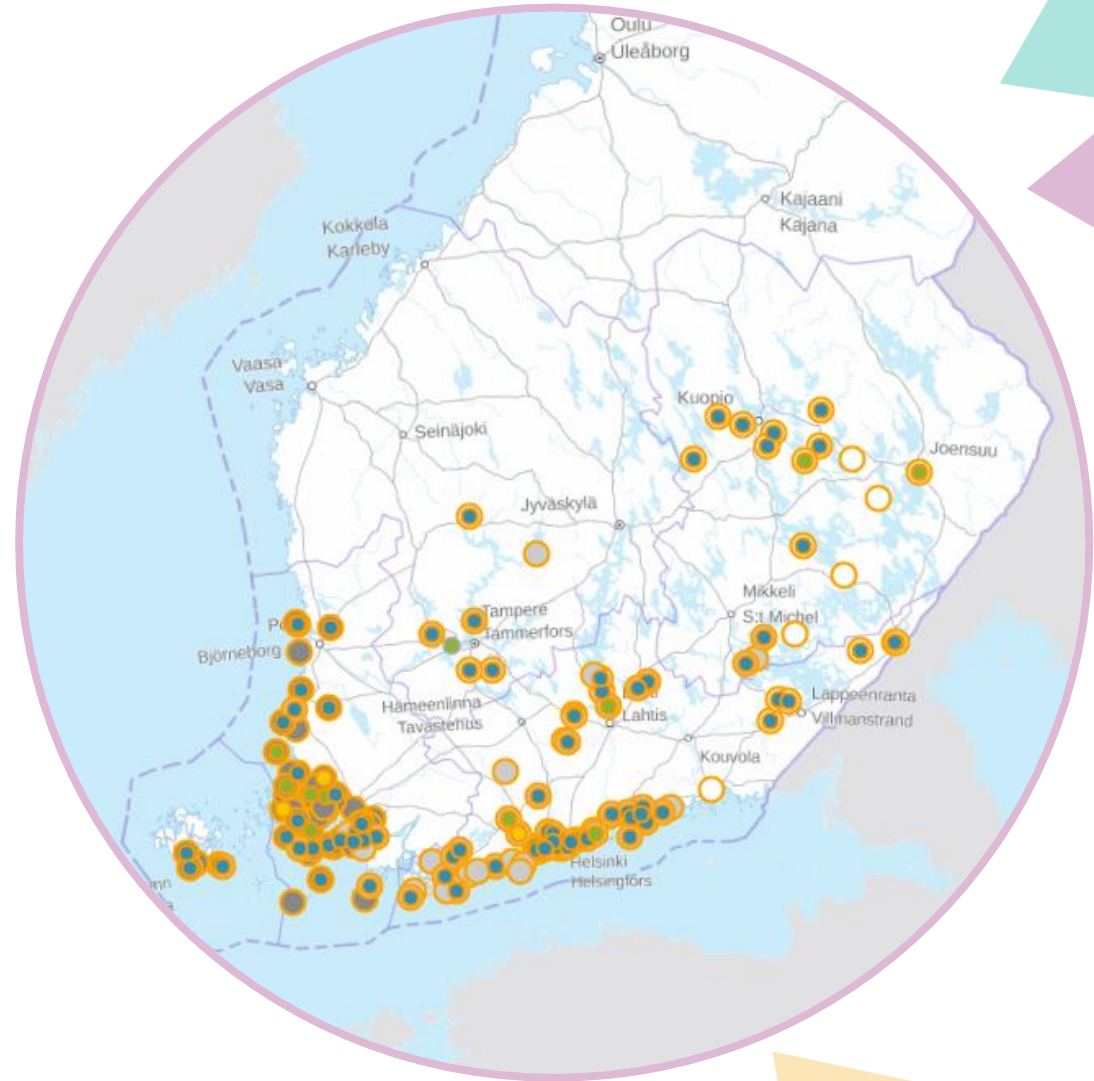
INSPIRING OTHERS

The easiest way to involve a crowd is to use an existing network



Photo by [Duy Pham](#) on [Unsplash](#)

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



ALWAYS ROOM FOR IMPROVEMENT

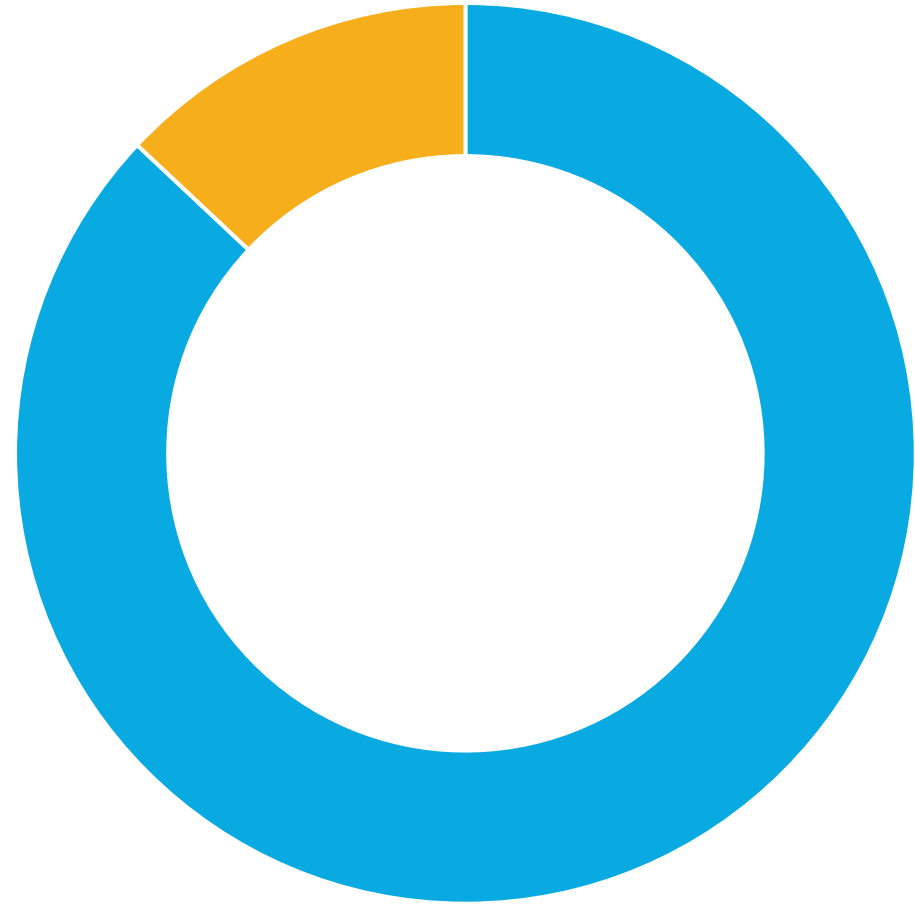
Equality is not evident

In Wikipedia only

13 %

of the contributors
are women.

Source: [Wikipedians](#)



Thank you!