



CITIZEN SCIENCE PROGRAM NEWSLETTER

VOL. 2 | April 2021



Cover photos by Eika Jones

APRIL 2021 — GLOBAL CITIZEN SCIENCE MONTH

Well, we were going to wait until next month to release another newsletter, but it turns out that April is a special month — Global Citizen Science month! This is a global initiative to celebrate folks just like you who are involved in various citizen science projects and initiatives around the world.

You don't have to be an academic or have a Masters or a PhD, you just have to have a passion and a desire to learn. Citizen scientists, just like our PSF Citizen Science Oceanography crews, are contributing to massive collaborations resulting in data collection at global and temporal scales that have never before been achieved. Citizen science is "leading to discoveries that a single scientist could never achieve on their own." Citizen Science is contributing to research, science and advancements in ecology, astronomy, medicine, computer science, statistics, psychology, genetics, engineering, biology and so much more!

THE OXFORD DICTIONARY DEFINITION OF CITIZEN SCIENCE:

“The collection and analysis of data relating to the natural world by members of the general public, typically as part of a collaborative project with professional scientists”

Want to learn more about Citizen Science Month and Cit Sci projects around the world?

Check out the following resources for more information:

- ▶ Government of Canada Citizen Science Portal www.ic.gc.ca/eic/site/063.nsf/eng/h_97169.html
- ▶ SciStarter — a global online citizen science hub <https://scistarter.org/citizen-science>
- ▶ [iNaturalist.ca](https://www.inaturalist.org/) — a cool App to record species observations
- ▶ BC Parks Nature Challenge <https://bcparksfoundation.ca/projects/wildlife-for-ever/bc-parks-inaturalist-project/>



Watch this interesting TEDx Talk on Citizen Science by Dr. Caren Cooper on [YouTube](#)



OTHER EXCITING NEWS

Based on our citizen scientists observations, it looks like we were successful in capturing this years Spring bloom. In case you missed last month’s edition of the newsletter, the Spring bloom was predicted to occur around March 27th (between March 17- April 13). Each year, we have increased sampling in March and April (3 times per month) in an effort to capture and collect data during this important time — and it looks like this hard work paid off. After April, the sampling is scheduled for only two times per month, rather than the three times per month that our crews have been doing in the early spring.

To date, between March through April crews have collected a total of:

- ▶ 346 Nutrient Samples
- ▶ 380 Phytoplankton Samples
- ▶ 18 Biotxin Samples
- ▶ 68 Chlorophyll Samples
- ▶ 508 Secchi Readings

Blooms, Blooms and More Blooms!

Right now, there have been reported blooms of *Noctiluca scintillans*, which as indicated by Svetlana Esenkulova, PSF Phytoplankton Taxonomist, is a heterotrophic dinoflagellate (basically, they eat other phytoplankton). This does not cause Paralytic Shellfish Poisoning (PSP aka “red tide”) despite the “red tide” appearance. It is not considered harmful, and its more common name is “sea sparkle”. This name comes from the fact that it is bioluminescent. Similar blooms were observed in 2018. Blooms were observed by Dr. Isobel Pearsall, in the Gabriola Island area; the Powell River crew, Ed Oldfield and John Sinclair, near the north end of Texada; and by Nicole Frederickson via the Powell River Ferry. There was also a report at Telegraph Bay Beach on the weekend, so it appears to be fairly widespread.

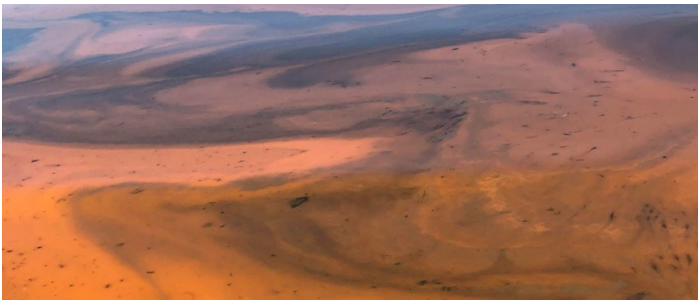
Earth Day — April 22

Not only is April Global Citizen Science Month, but April 22 marks the annual world-wide Earth Day. We would like to acknowledge each of you for your contributions through your hard work for the Citizen Science program already this year and in past years.

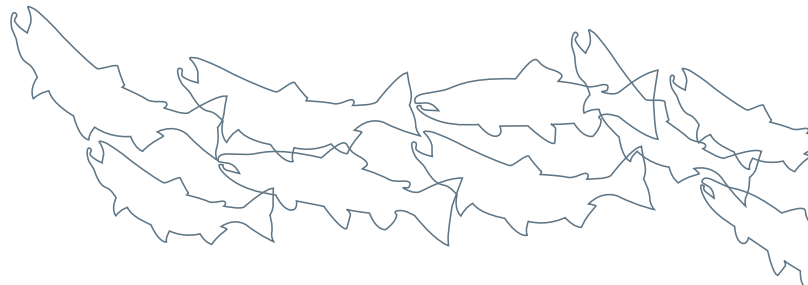
FUN FACT: The first Earth Day was celebrated 51 years ago on April 22, 1970



Steveston Citizen Scientist Billy McMillan lowers a secchi disk into the water.



Noctiluca bloom off Gabriola Island, taken by Mitch Miller



OUR DATA ARE BEING ENDORSED GLOBALLY

Some more exciting information! The data that our citizen scientists are collecting and the PSF Citizen Science Oceanography program is being endorsed by the Global Harmful Algal Blooms Programme (GlobalHab).

The GlobalHab is an international science programme related to harmful algal blooms that is jointly sponsored by the Scientific Committee on Oceanic Research (SCOR) and the Intergovernmental Oceanographic Commission (IOC) of UNESCO.

The goal of the program is to:

“improve understanding and prediction of Harmful Algal Blooms (HABs) in aquatic ecosystems, and management and mitigation of their impacts”

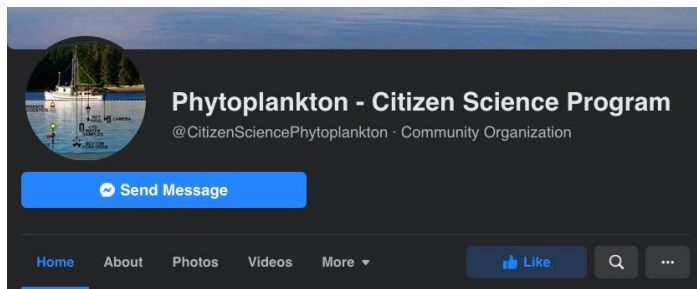
What does this mean?

It means that the data that our crews are collecting is being used by world renowned, leading edge scientists to help inform research on the impacts of HAB's at an international level. The PSF Citizen Science Program is the only HABs endorsed project that currently involves citizen science.

Learn more here: www.globalhab.info



Noctiluca bloom. The left image was taken on April 20, 2021 by Dan Backe on Gabriola Island. The image on the right was taken on April 20, 2021 by Nicole Frederickson from the Powell River to Little River (Comox) ferry.



STAY IN THE KNOW...

If you are on Facebook and want to stay updated on program results, observations or news, you can follow the [Phytoplankton – Citizen Science Program](#) page. . Simply search using the page name and then be sure to click 'Like'.



Upcoming Sample Dates

Below is a schedule of the upcoming sample dates for May through July. Starting in May we will be reducing sampling from three times per month to two times per month.

May	June	July
Tuesday May 11, 2021	Thursday June 10, 2021	Friday July 9, 2021
Wednesday May 19, 2021	Thursday June 17, 2021	Saturday July 17, 2021

THANK YOU AGAIN FOR ALL YOUR HARD WORK!

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