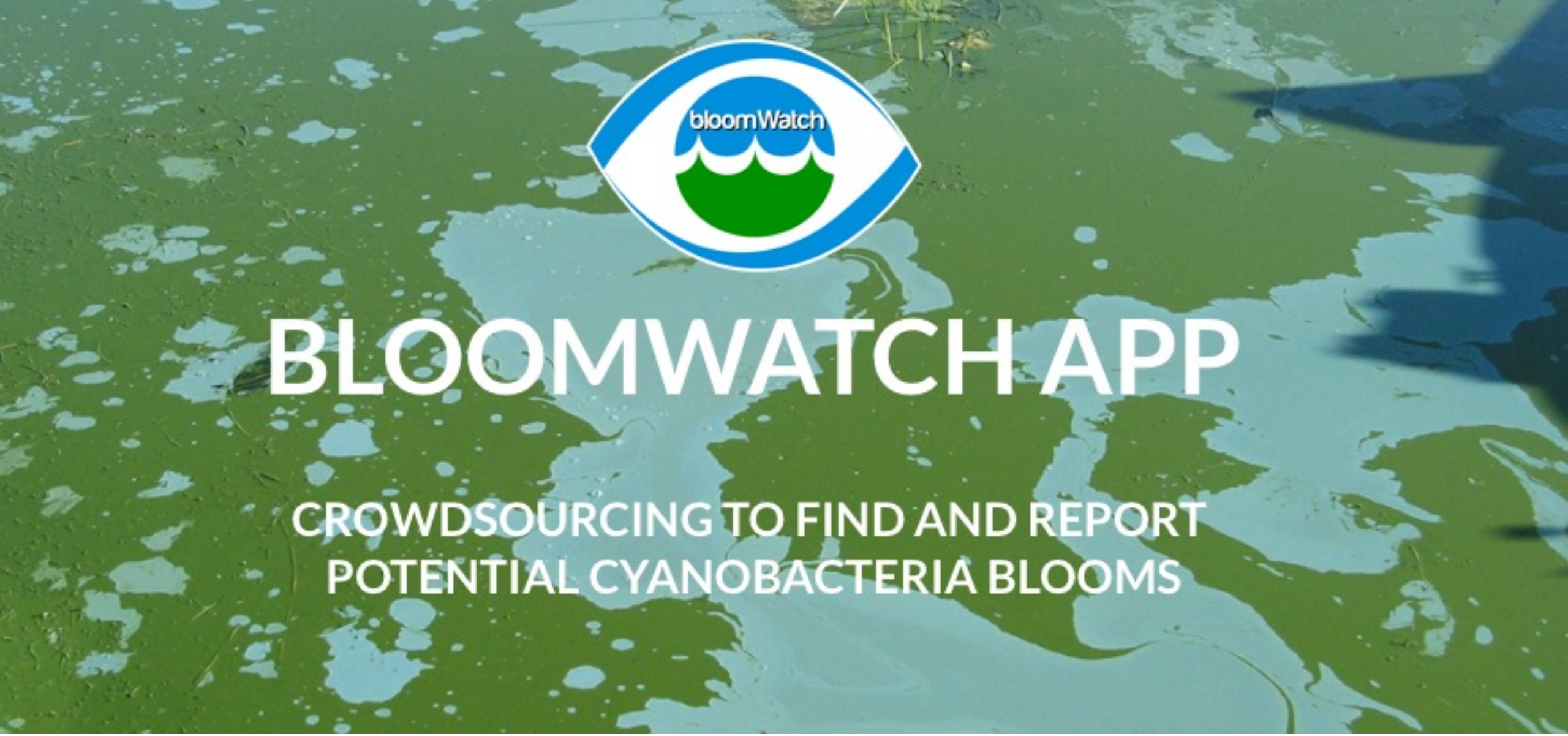


Shane Bradt UNH Cooperative Extension

Cyanobacteria Monitoring Collaborative Mini-Conference March 2021

CYANO MONTORING

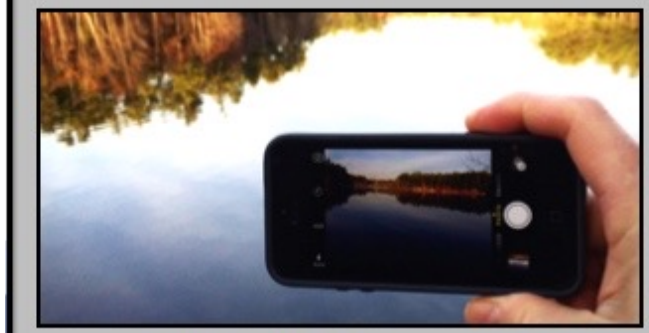
lake water is collected to examine long-term & seasonal patterns of cyanobacteria

collected from shore or boat

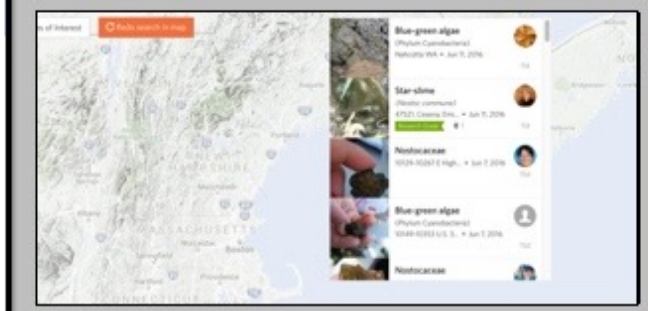
analyzed for phycocyanin and chlorophyll

BLOOMWATCH APP

the bloomWatch App is used to photograph blooms and lake conditions



additional info is documented



picture & details sent to database and relevant state authorities

CYANOSCOPE

cyanobacteria are collected, concentrated and viewed under a microscope

cyanos are ID'ed using the "Dirty Dozen" key

pictures and identification submitted and shared for confirmation and analysis

●●●○○ AT&T Wi-Fi 12:44 PM 38%

bloomWatch!

Does lake/pond have public access for boating, fishing, or bathing?

Yes SELECT

Weather conditions:

Overcast SELECT

Surface conditions:

Choppy SELECT

Bloom size or extent:

Smaller than a sedan SELECT

Introduction Information Photo Capture Submit

Back to TestFlight 12:38 PM 38%

bloomWatch!

Photo 1: Attempt to capture the areal extent of the bloom, (lake/pond wide, along the shoreline, etc.). If additional description is necessary, enter it in the box below.

Describe Photo 1

Latitude: Longitude:

Latitude Phot... Longitude Ph...

Introduction Information Photo Capture Submit

2021 Mini-Conference Info and Registration

WHAT IS BLOOMWATCH?

HOW DOES IT WORK?

WHERE ARE THE BLOOMS?

HOW DOES THE BLOOMWATCH APP WORK?

1. Download the app

Install bloomWatch app on your smartphone or tablet

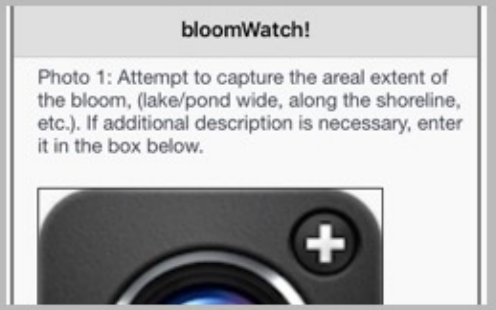
DOWNLOAD FOR IOS

DOWNLOAD FOR ANDROID

2. Learn what to look for

Get familiar with the appearance of cyanobacteria blooms

SEE REPORTED BLOOMS



3. Report what you found

Document blooms with the app

1) use bloomWatch app to take good photos of potential blooms, 2) submit your photos to the project, 3) send info to the relevant state agency

LEARN HOW TO USE BLOOMWATCH

NOTE: Avoid bloom and don't touch the water

NOTE: Submissions through bloomWatch do not constitute a formal report to authorities

NOTE: Images submitted via bloomWatch will be used only for citizen science purposes and will not be sold or distributed to advertisers or other entities

bloomWatch 4+

United States Environmental Protection Agency (USEPA)

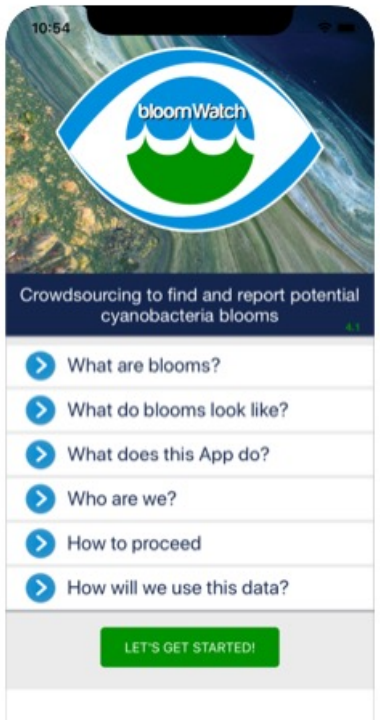
Designed for iPad

★★★★☆ 3.7 • 7 Ratings

Free

View in Mac App Store ↗

Screenshots iPad iPhone



EPA bloomWatch

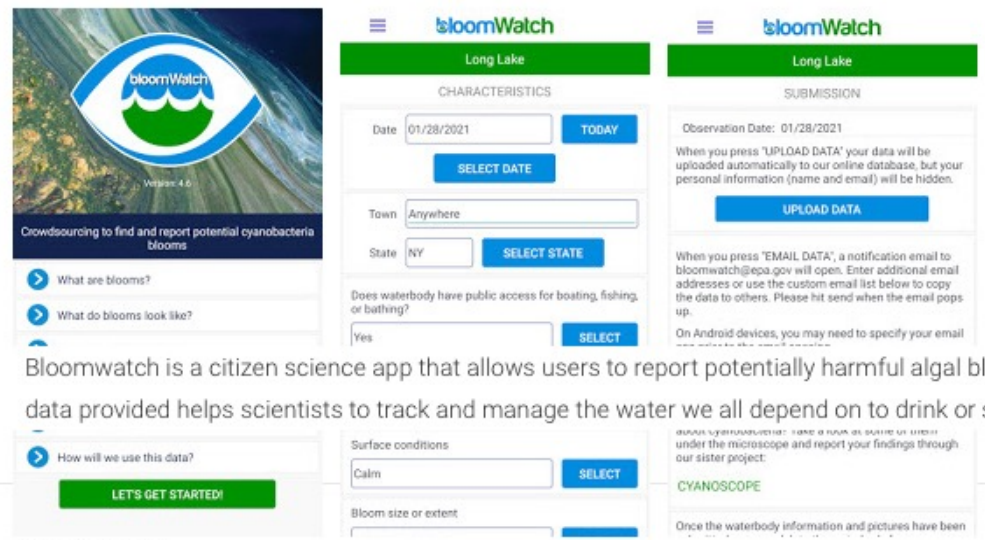
US Environmental Protection Agency Productivity

Everyone

You don't have any devices

Add to Wishlist

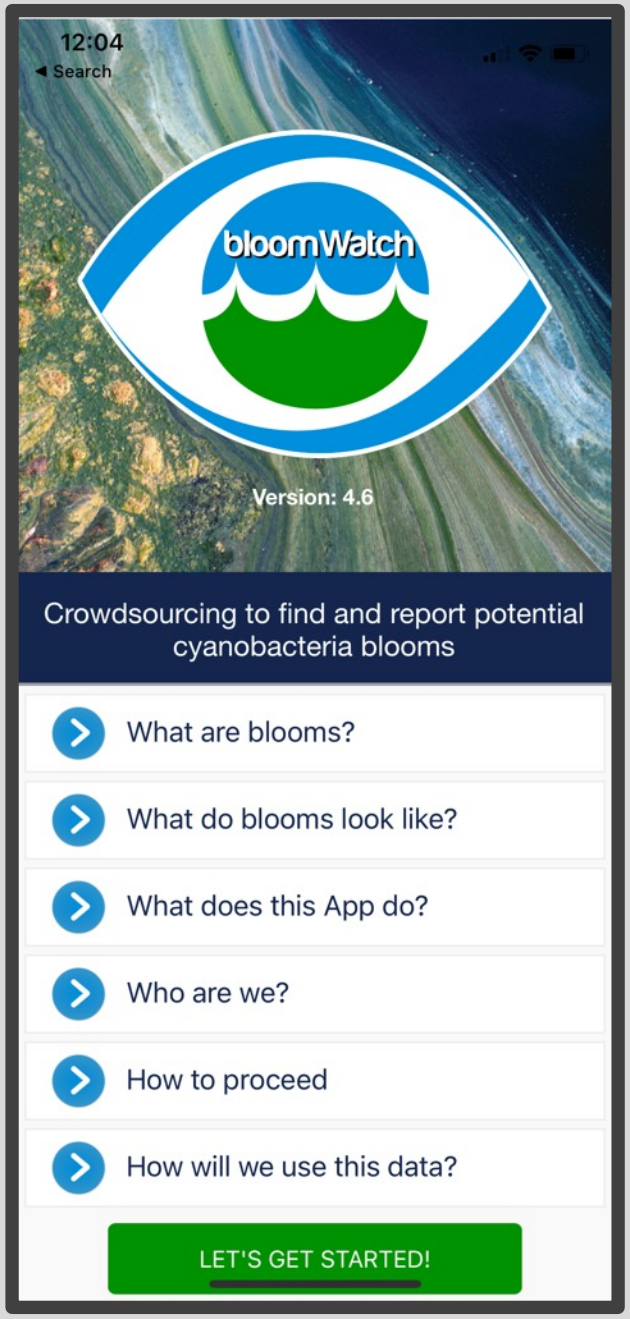
Install

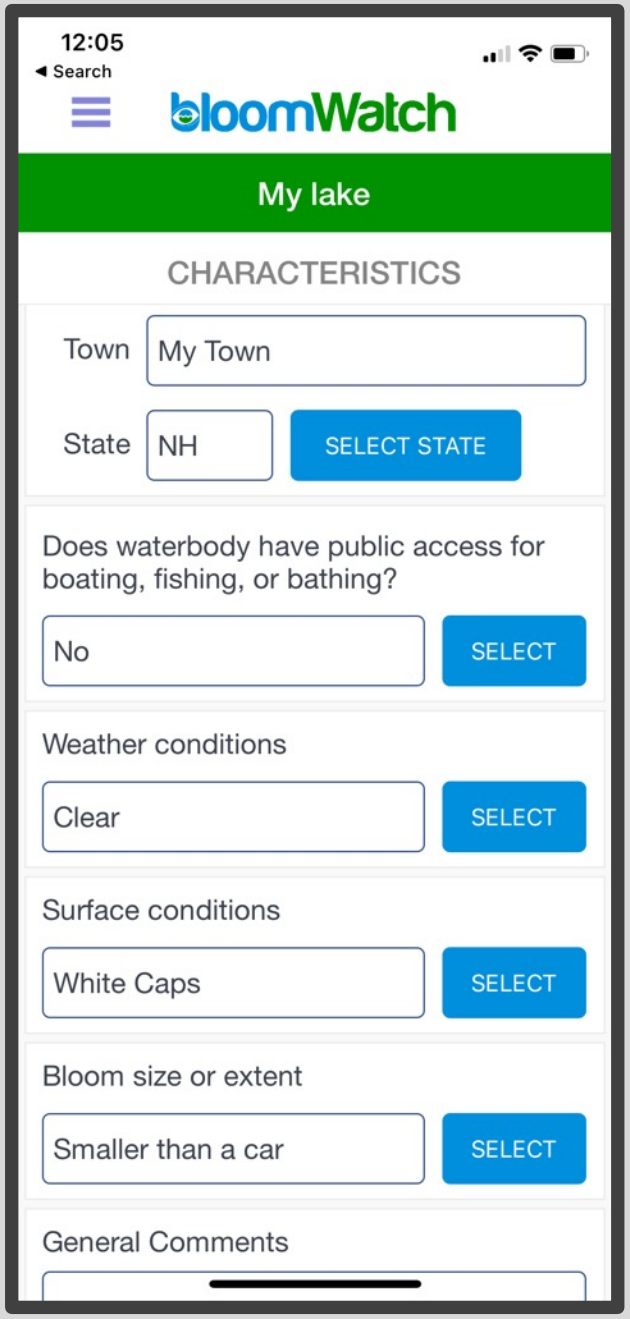


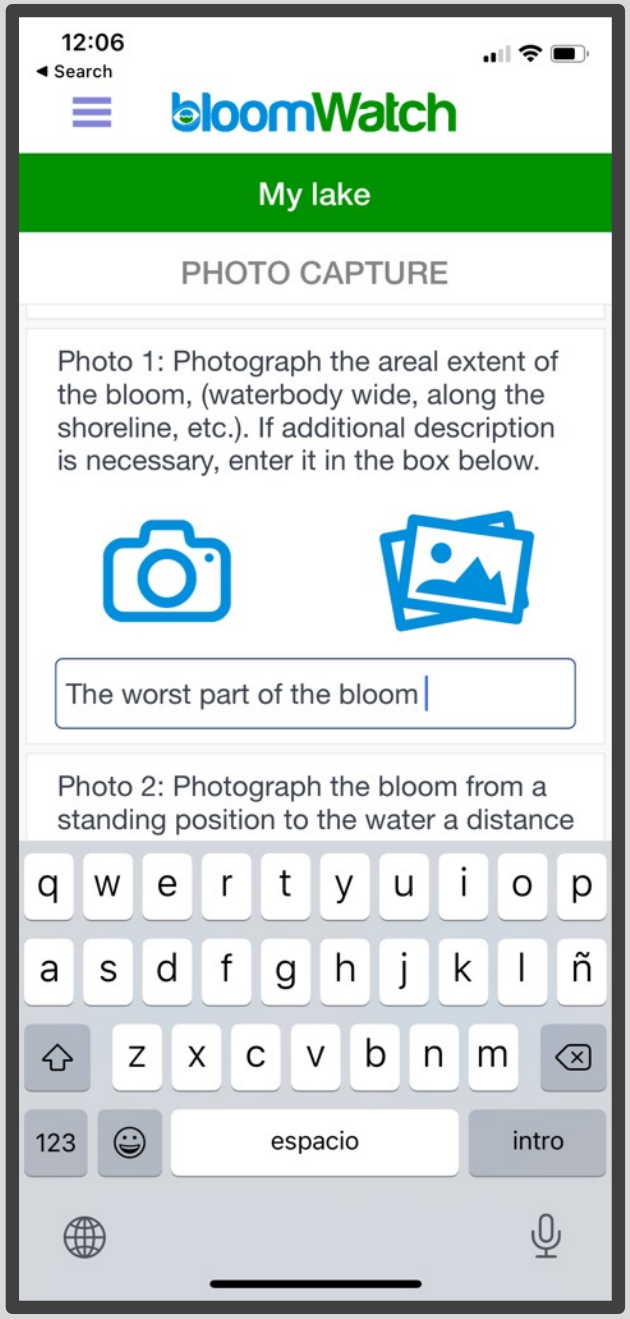
Bloomwatch is a citizen science app that allows users to report potentially harmful algal blooms. The data provided helps scientists to track and manage the water we all depend on to drink or swim in.

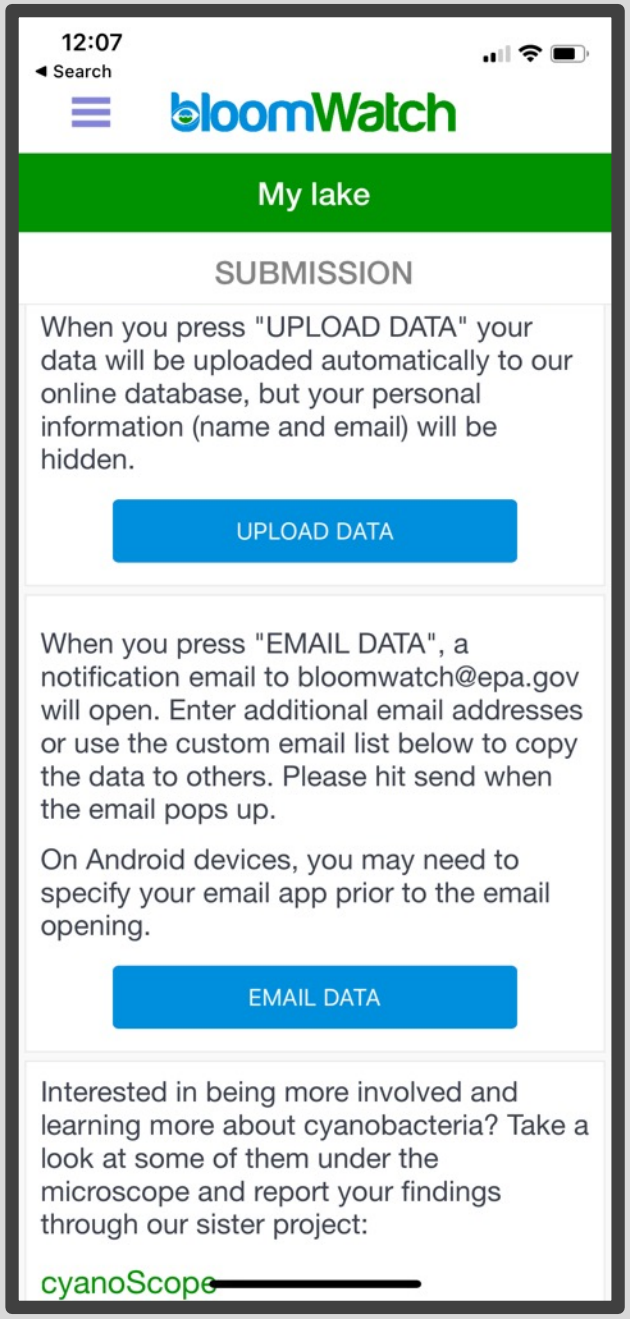
WHAT'S NEW

Initial release on EPA store

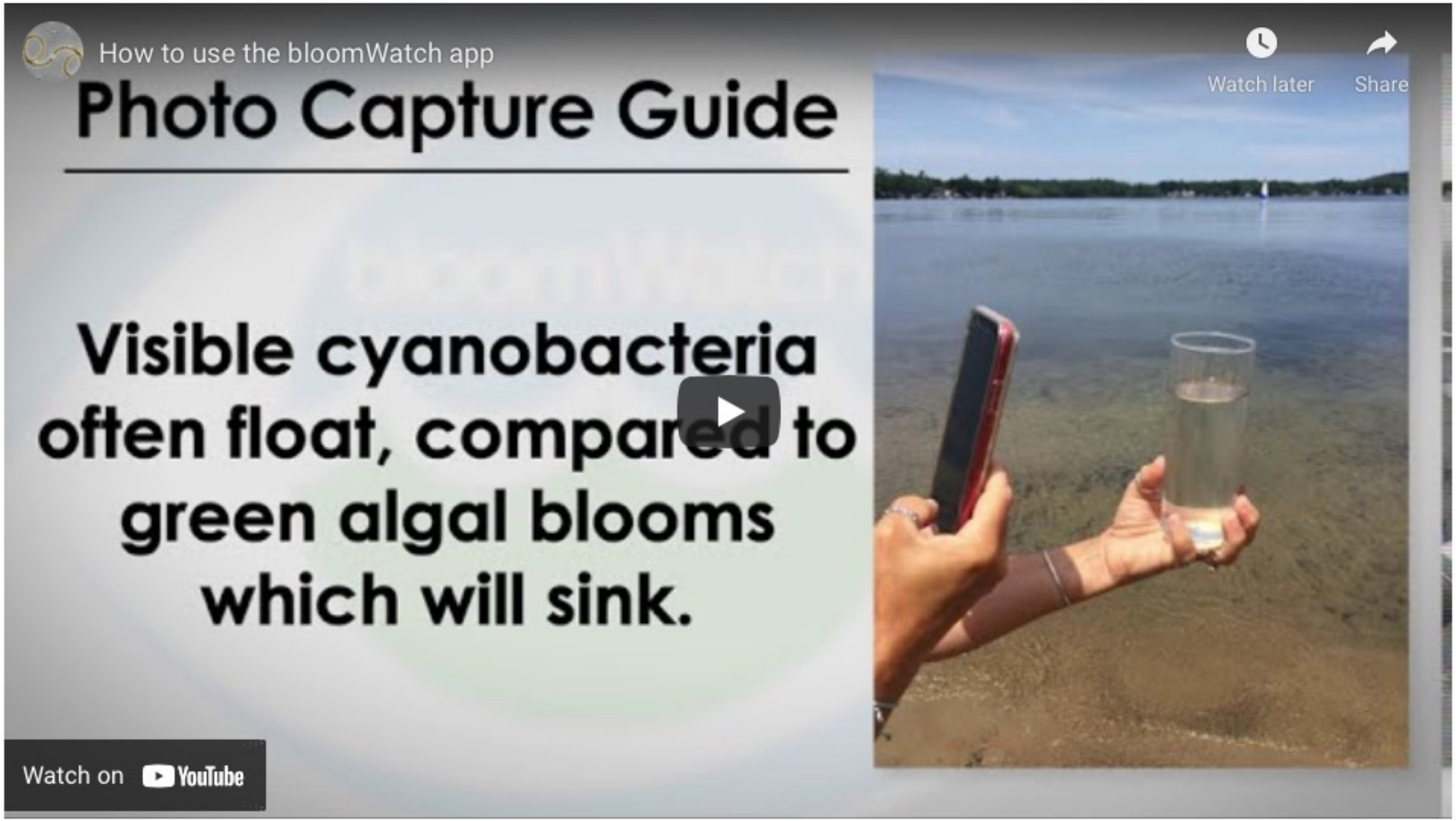

12:04
Search
bloomWatch
Version: 4.6
Crowdsourcing to find and report potential cyanobacteria blooms
What are blooms?
What do blooms look like?
What does this App do?
Who are we?
How to proceed
How will we use this data?
LET'S GET STARTED!


12:05
Search
bloomWatch
My lake
CHARACTERISTICS
Town
My Town
State
NH
SELECT STATE
Does waterbody have public access for boating, fishing, or bathing?
No
SELECT
Weather conditions
Clear
SELECT
Surface conditions
White Caps
SELECT
Bloom size or extent
Smaller than a car
SELECT
General Comments


12:06
Search
bloomWatch
My lake
PHOTO CAPTURE
Photo 1: Photograph the areal extent of the bloom, (waterbody wide, along the shoreline, etc.). If additional description is necessary, enter it in the box below.
The worst part of the bloom
Photo 2: Photograph the bloom from a standing position to the water a distance
q w e r t y u i o p
a s d f g h j k l ñ
z x c v b n m
123
espacio
intro


12:07
Search
bloomWatch
My lake
SUBMISSION
When you press "UPLOAD DATA" your data will be uploaded automatically to our online database, but your personal information (name and email) will be hidden.
UPLOAD DATA
When you press "EMAIL DATA", a notification email to bloomwatch@epa.gov will open. Enter additional email addresses or use the custom email list below to copy the data to others. Please hit send when the email pops up.
On Android devices, you may need to specify your email app prior to the email opening.
EMAIL DATA
Interested in being more involved and learning more about cyanobacteria? Take a look at some of them under the microscope and report your findings through our sister project:
cyanoScope

VIDEO: HOW TO USE BLOOMWATCH



bloomWatch

302	168	137	1,440
members	observations	locations	measurements

OPEN PUBLIC

Help track cyanobacteria blooms using your smartphone!

Are you seeing a normally-clear lake that has suddenly turned the color of pea soup or a blue-green paint spill? It may be a bloom of cyanobacteria, which has the potential to produce toxins that affect humans, pets, and our ecosystems.

State and local officials can't be watching every lake at ...

Manager: Hilary Snook

Add Data

bloomWatch

BLOOM REPORTS BY REGION ALL REGIONS

bloom reports

32

visible on map

Report from lake beseck, middlefield, CT on 1/27/2021
Lat: 41.372772, Lon: -72.551697
Size: Larger than a football field
Lake condition: Choppy
Weather: Overcast

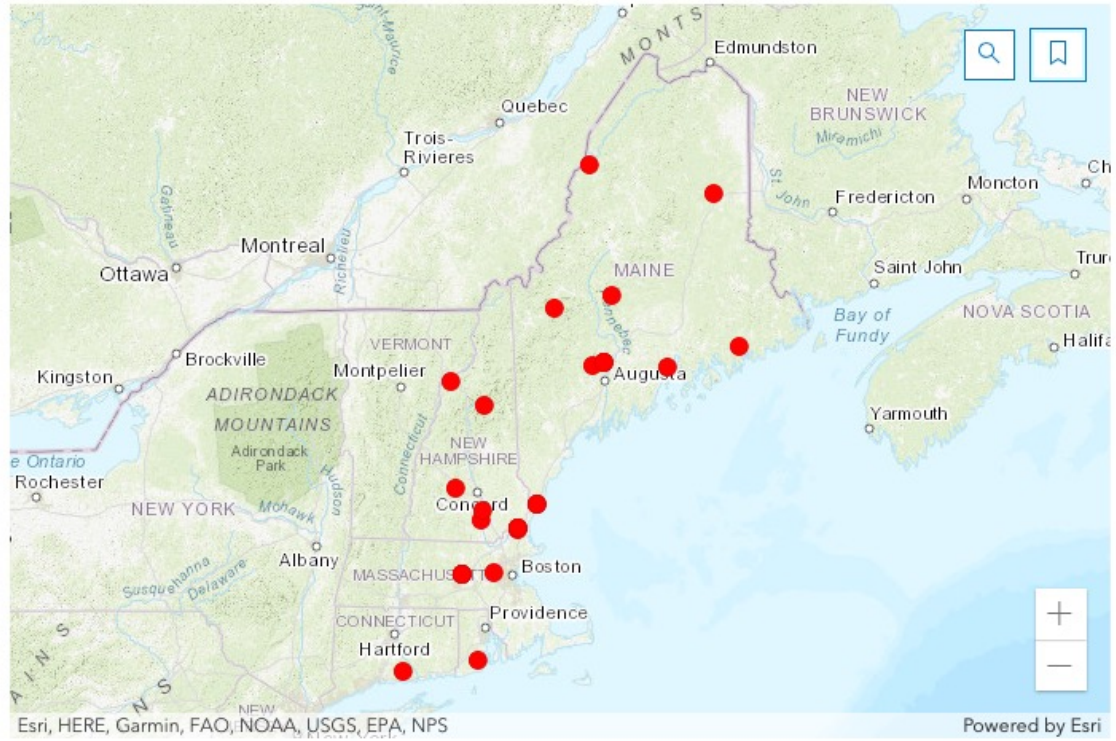
Report from My Office Pond, SK, RI on 1/19/2021
Lat: 41.489989, Lon: -71.526527
Size: No bloom present
Lake condition: Calm
Weather: Overcast

Report from Test 3, Nowhere, ME on 1/14/2021
Lat: 43.089104, Lon: -70.705170
Size: Smaller than a car
Lake condition: Choppy
Weather: Overcast

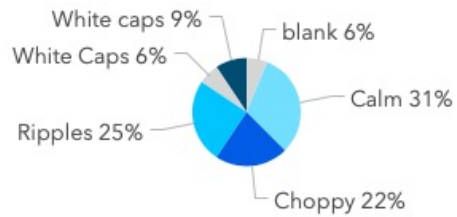
Report from Dog, Nowhere, MA on 1/13/2021
Lat: 43.089256, Lon: -70.705360
Size: Between a football field and a tennis court
Lake condition: Ripples
Weather: Partly Cloudy

Report from Test, Test, ME on 12/24/2020
Lat: 44.455585, Lon: -68.915428
Size: Larger than a football field
Lake condition: White Caps
Weather: Clear

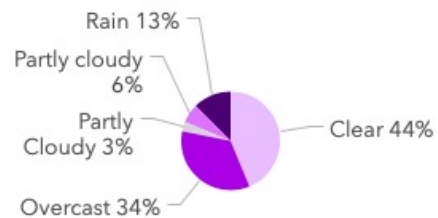
Report from Test, Bedford, NH on 12/18/2020
Lat: 42.928060, Lon: -71.478890
Size: No bloom present
Lake condition: Calm



Surface conditions



Weather conditions



Bloom photos

Attachments

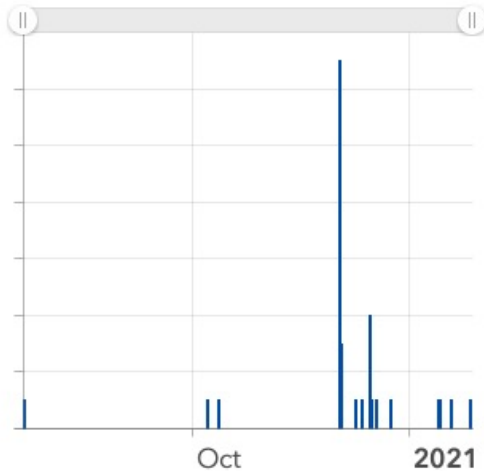
01611854365.jpeg

01611854367.jpeg

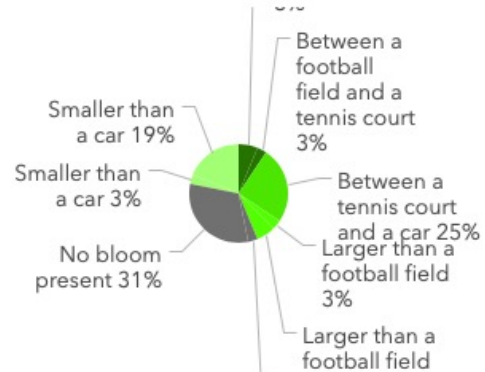
01611854368.jpeg

Bloom photos from lake beseck on 1/27/2021

Report date

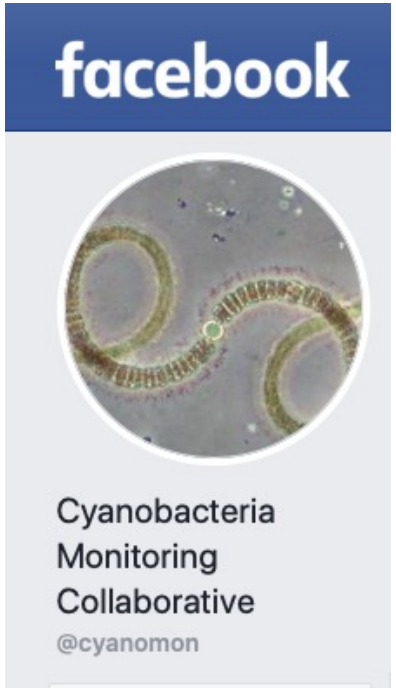


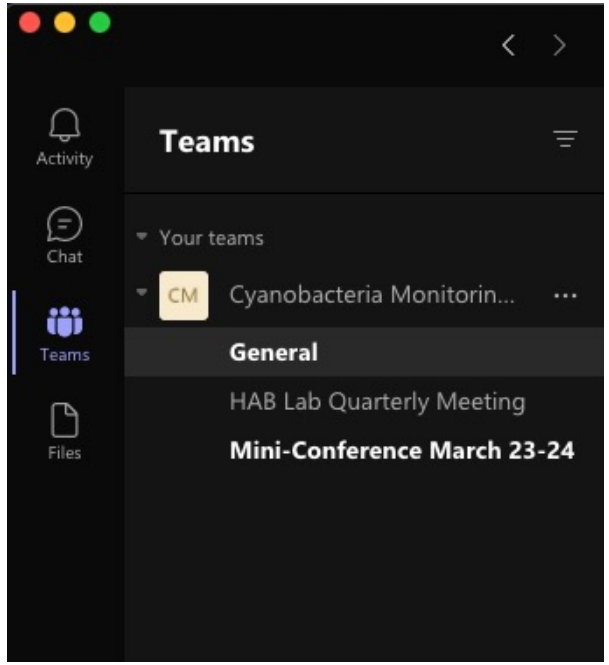
Bloom extent

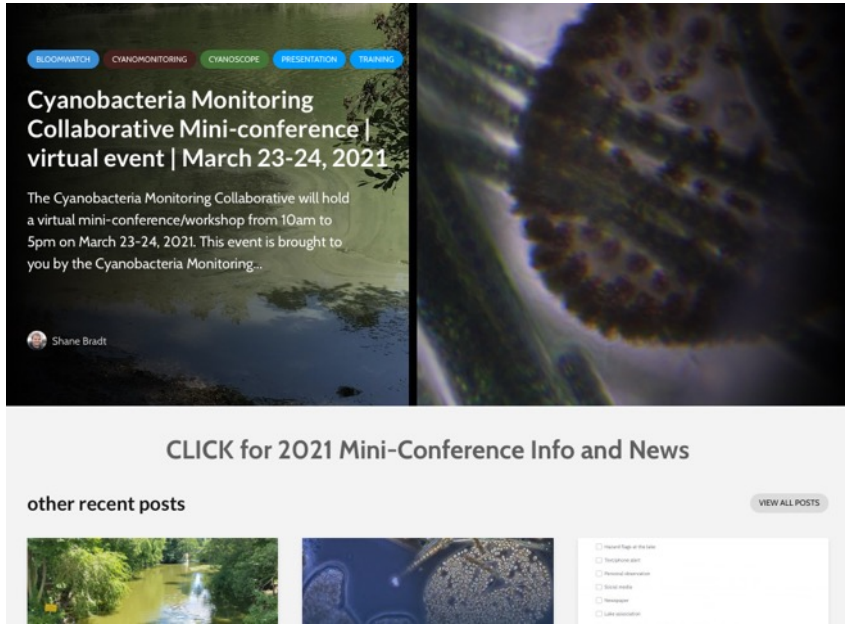


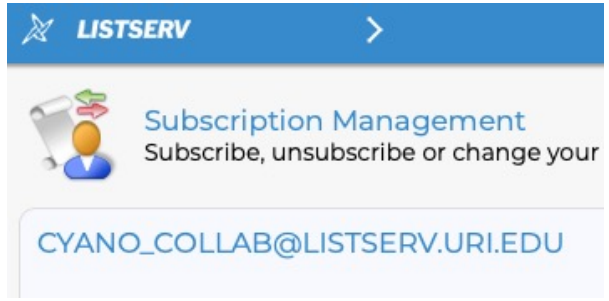
The Cyanobacteria Monitoring Collaborative will hold a virtual mini-conference/workshop from 10am to 5pm on March 23-24, 2021.

This event is brought to you by the Cyanobacteria Monitoring Collaborative, UNH Cooperative Extension, UNH Department of Biological Sciences, the US Environmental Protection Agency Region 1 Laboratory, and PhycoTech, Inc.









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twitter @limnoshane

https://cyanos.org/
https://cyanos.org/bloomwatch

UNH Extension