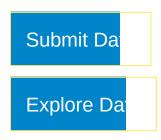
### **Phytoplankton Monitoring Network (PMN)**

**Better Understanding of Harmful Algal Blooms Through Volunteer Monitoring** 

https://coastalscience.noaa.gov/science-areas/stressor-impacts-mitigation/pmn/



The National Phytoplankton Monitoring Network (PMN) is a community-based network of volunteers monitoring marine phytoplankton and harmful algal blooms (HABs). PMN recognizes the interrelationships between humans and coastal ecosystems while providing volunteer citizen scientists with meaningful opportunities for hands-on science engagement. The PMN enhances the Nation's ability to respond to and manage the growing threat posed by HABs by collecting important data for species composition and distribution in coastal waters and creating working relationships between volunteers and professional marine biotoxin researchers.



**About PMN** 

Learn more about the PMN program goals, history, and staff.



### Volunteering / Training

Information and tools for new and current PMN volunteers.



Submit current data collections and view historical data.



Plankton images collected in the field as well as volunteer pics.

# Example for ATLANTIC REGION 1 DATA ENTRY

# PMN ATLANTIC REGION 1 DATA ENTRY

- New Hampshire, Massachusetts, Rhode Island, Connecticut, New York
- john.doe@noaa.gov Switch account

Draft saved

- \* Required
- Email\*
- If you do not see your PMN ID or site name listed, please exit data entry form and contact PMN for activation. Email: pmn@noaa.gov
- Please choose your PMN ID from the list below:\*
- MA51

Next

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Clear form

Never submit passwords through Google Forms.

# PMN ATLANTIC REGION 1 DATA ENTRY

- john.doe@noaa.gov Switch account
- Draft saved
- \* Required
- MA51 sites
- •
- Town Pier

### PMN ATLANTIC REGION 1 DATA ENTRY

john.doe@noaa.gov Switch account

\* Required

#### Sample data- Atlantic Region 1

New Hampshire, Massachusetts, Rhode Island, Connecticut, New York

Date sample was collected* Click arrow below to view calendar or enter date as MM/DD/YYYY
Date
Time collected* Please be sure to indicate AM or PM using drop down box  Time
: AM
Water Temperature (Celsius)*
Your answer
Air Temperature (Celsius)*
Your answer
Salinity (ppt)*
Your answer
TARGET SPECIES* Please check one box for each line (will stay highlighted as pink until all lines have a check mark)
None
YES (1 cell up to ~60% of slide coverage)  Elevated (>60% slide coverage)
Akashiwo sanguinea Alexandrium spp. Ceratium furca Chaetoceros spp. Cochlodinium spp. Dinophysis spp. Prorocentrum spp. Pseudo-nitzschia spp. Akashiwo sanguinea Alexandrium spp.

Ceratium furca
Chaetoceros spp.
Cochlodinium spp.
Dinophysis spp.
Prorocentrum spp.
Pseudo-nitzschia spp.

OPTIONAL DATA- Although the following information is all optional, each question requires a response. Please leave NA as your response if you do not have data.

#### WEATHER\*

Sunny Partly cloudy Mostly cloudy Cloudy Rain NA

#### Wind direction\*

N

NE

Ε

SE S

SW

W

NW

NA

#### Wind speed\*

0-5 MPH 5-10 MPH 10-15 MPH 15-20 MPH 25+ MPH NA

#### Tide\*

Incoming
Full high tide
Outgoing
Dead low tide
NA

For the following items, please leave NA if you do not have data. Each line must have either a numerical value or NA to be valid.

Please convert your values for dissolved oxygen, barometric pressure and secchi depth to the units listed if necessary.
pH*
Dissolved oxygen (ppm)*
Barometric pressure (mmHg)*
Secchi depth (cm)- please convert from (m) to (cm)*
Please check any of the following groups that you may have also observed and the
relative abundance of each. If you don't know/can't ID, please leave NONE as response for each group.*
None
Yes Elevated
Centric diatoms Pennate diatoms Dinoflagellates Cyanobacteria Zooplankton Centric diatoms Pennate diatoms Dinoflagellates Cyanobacteria Zooplankton
Which single group of organisms was the MOST dominant overall on your slide? If
you're not sure or don't know, please leave NA as your response.*
Centric diatoms

Pennate diatoms Dinoflagellates Cyanobacteria Zooplankton

NA

Please indicate any phytoplankton you can identify by name and its relative abundance. If you're not sure/can't ID, please leave all boxes empty.

## YES (1 cell up to ~60% of slide coverage) Elevated (>60% slide coverage)

E	levated (>60% slide coverage)
Skeletonema Coscinodiscus Odontella Ditylum Navicula Nitzschia Asterionellopsis Thalassiosira Thalassionema Protoperidinium Rhizosolenia Eucampia Hemiaulus Triceratium Pleurosigma Guinardia Licomorpha Leptocylindrus Bacillaria Skeletonema Coscinodiscus Odontella Ditylum Navicula Nitzschia Asterionellopsis Thalassiosira Thalassionema Protoperidinium Rhizosolenia Eucampia	levated (>60% slide coverage)
Rhizosolenia	
Hemiaulus	
Triceratium	
Pleurosigma	
Guinardia	
Licomorpha	
Leptocylindrus	
Bacillaria	

If you can identify other phytoplankton not listed above, please write in name(s) below. If not, please leave NA.*
Please indicate any zooplankton/other you can identify by name. If you're not sure/can't ID, please leave NA as your response.*
Nauplius Zoea Copepod Tintinnid Ciliate Rotifer pollen NA Other:
Do you have any PHOTOS? Send to <a href="mailto:pmn@noaa.gov">pmn@noaa.gov</a> * Do you have any photos to send? Remember, if possible, you should be taking photos of all target organisms (and any unknowns) for confirmation purposes. You can make a single PDF of all photos labeled with IDs, a PowerPoint presentation of all photos labeled with IDs, or send as individual image files labeled with IDs. Please email photos to <a href="mailto:pmn@noaa.gov">pmn@noaa.gov</a>
Yes No
Any final observations or comments?* Please enter any additional observations you may have (water color, smell, other organisms seen, etc) using the "Other' response.
NO Other:
PLEASE take a moment to review your data entry above for accuracy. "NO" will allow you to review your entries. Once submitted, it cannot be edited but must be re-entered. If re-entered, please type "Correct data" in comments section.*  ARE YOU READY TO SUBMIT YOUR DATA?  Yes No