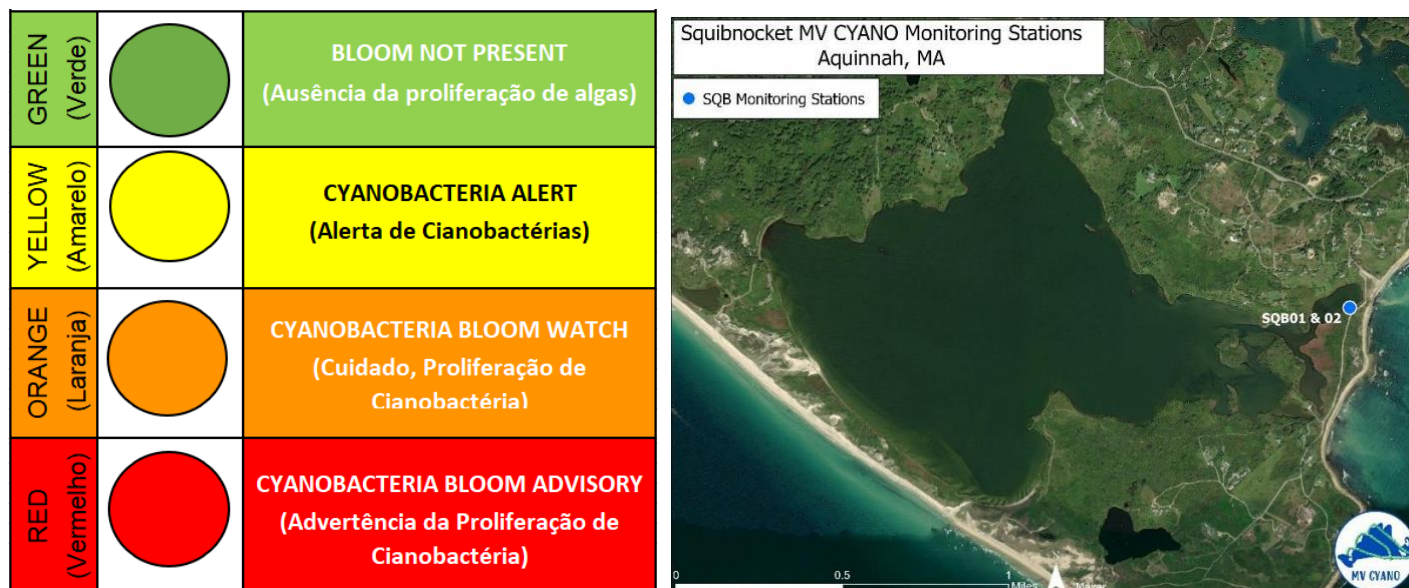


MV CYANO 2024 data for Squibnocket Pond

Samples collected and analyzed by great Pond Foundation using a bbe Moldaenke Fluoroprobe II. For more information, please see www.greatpondfoundation.org/mvcyano/



MV CYANO data are generated from a bbe Moldaenke Fluoroprobe instrument. This instrument is a fluorometer, which measures the biomass (quantity) of microscopic plants by detecting the fluorescence produced in response to different wavelengths of light. The amount of fluorescence is directly related to the concentration of plant pigments in the sample. Different types of microscopic aquatic plants, called phytoplankton, utilize different pigments, which allows the fluorometer to differentiate and quantify different phytoplankton taxa. The Fluoroprobe measures the concentration of cyanobacteria in micrograms per liter ($\mu\text{g/L}$) and estimates the number of cells per milliliter (cells/mL). The MV CYANO color designations are based on the $\mu\text{g/L}$ measurement. The total amount of plant pigments in the water sample corresponds to the amount of chlorophyll, measured in $\mu\text{g/L}$. The concentration of chlorophyll is a measurement of the phytoplankton biomass in the sample. Salinity and water temperature, measured at the time of sample collection, are factors that can influence the growth rate of cyanobacteria and other types of phytoplankton. The MV CYANO color determination (see color-chart above) corresponds to the risk level determined by the local Board of Health agencies based on the concentration of cyanobacteria and other environmental factors. The MV CYANO risk matrix is reviewed annually and updated as needed in order to stay current with health standards and scientific studies.

Station	Pond	Date	Cyanobacteria ($\mu\text{g/L}$)	Cyanobacteria (cells/mL)	Chlorophyll ($\mu\text{g/L}$)	Temp (°C)	Temp (°F)	Salinity (ppt)	MV CYANO
SQB01	SQB	5/28/2024	9.11	9106.20	40.83	20.9	69.62	11.47	yellow
SQB01A	SQB	5/28/2024	26.26	26262.50	375.06	20.9	69.62	11.47	orange
SQB01	SQB	6/3/2024	6.34	6340.00	28.35	22.20	71.96	11.20	yellow
SQB01	SQB	6/10/2024	7.63	7632.00	22.86			8.71	yellow
SQB01	SQB	6/17/2024	6.61	6607.60	16.03	27.38	81.28	12.10	yellow
SQB01A	SQB	6/17/2024	55.95	55947.10	164.00	27.38	81.28	12.10	red
SQB01	SQB	6/17/2024	6.61	6607.60	16.03	27.38	81.28	12.10	yellow
SQB01A	SQB	6/17/2024	55.95	55947.10	164.00	27.38	81.28	12.10	red
SQB01	SQB	6/24/2024	3.89	3890.00	9.94	27.78	82.00	13.00	yellow

SQB01A	SQB	6/24/2024	58.35	58347.10	151.26	27.78	82.00	13.00	red
SQB01	SQB	7/1/2024	2.60	2597.30	4.03	23.70	74.66	12.90	yellow
SQB01A	SQB	7/1/2024	26.32	26317.40	131.89	23.70	74.66	12.90	red
SQB01	SQB	7/8/2024	21.77	21765.20	24.16	27.50	81.50	13.20	red
SQB01A	SQB	7/8/2024	22.95	22950.60	27.98	27.50	81.50	13.20	red
SQB01	SQB	7/15/2024	8.39	8392.30	13.90	28.30	82.94	12.03	red
SQB01A (material)	SQB	7/15/2024	69.86	69856.90	152.58	28.80	83.84	12.03	red
SQB01	SQB	7/22/2024	10.59	10593.00	37.73	27.30	81.14	13.07	red
SQB01A (material)	SQB	7/22/2024	312.55	312551.70	601.99	27.30	81.14	13.07	red
SQB01	SQB	7/31/2024	4.50	4494.70	11.36	25.80	78.44	13.03	red
SQB01A	SQB	7/31/2024	344.11	344105.20	840.57	25.80	78.44	13.03	red
SQB01	SQB	8/6/2024	3.59	3590.90	11.34	26.50	79.70	13.80	red
SQB01A (material)	SQB	8/6/2024	424.32	424314.80	1550.00	26.50	79.70	13.80	red
SQB01	SQB	8/12/2024	2.28	2276.20	15.07	23.80	74.84	13.98	red
SQB01A (material)	SQB	8/12/2024	491.42	491422.00	854.49	23.80	74.84	13.98	red
SQB01	SQB	8/19/2024	2.95	2948.60	29.25	23.70	74.66	14.49	red
SQB01A (material)	SQB	8/19/2024	951.17	951167.60	1965.22	23.70	74.66	14.49	red
SQB01	SQB	8/26/2024	5.38	5377.50	22.23	24.40	75.92	12.33	red
SQB01A (material)	SQB	8/26/2024	332.83	332832.40	939.94	24.40	75.92	12.33	red
SQB01	SQB	9/4/2024	1.93	1934.10	37.43	23.52	74.34	13.10	red
SQB01	SQB	9/9/2024	1.54	1538.00	11.35	20.39	68.70	13.70	red
SQB01	SQB	9/17/2024	1.87	1865.40	13.41	23.30	73.94	14.30	orange
SQB01	SQB	9/25/2024	1.48	1475.70	20.58	17.20	62.96	15.13	orange
SQB01	SQB	9/30/2024	0.00	0	84.283	19.78	67.60	15.30	orange
SQB01	SQB	10/7/2024	0.00	0.00	28.53	19.00	66.20	15.40	orange
SQB01	SQB	10/16/2024	0.00	1.70	8.17	11.40	52.52	15.53	orange

