# What's that in the water? How to identify algae, plants, and issues of concern



## **Cyanobacteria**





### Also known as:

Blue-green algae

#### Watch for:

Pea soup, green paint, floating mats of scum. Tends to stick to a stick.

#### **Notes: Likely a concern**

Can create a toxin called microcystin that is harmful to people and pets. Produces fowl odors as bacteria decays, is often more pungent than planktonic algae. There is no way to visually identify whether a particular bloom contains toxins.

Can bloom anytime in summer, is usually associated with periods of warm weather and low rainfall.

#### **Options:**

- Similar to planktonic algae. Reduce nutrient runoff into waters from fertilizers and organic materials like leaves, grass clippings, and other yard waste.
- · Avoid contact. "When in doubt, keep out!"

#### Also known as:

Simply "algae"

#### Watch for:

A blue-green, green, gold, brown, or even reddish dye in the water. May or may not stick to a stick. Can produce fowl odors.

#### **Notes: A potential concern**

This algae is a natural part of the aquatic ecosystem, but can become excessive and imbalanced with watershed (stormwater) input or nutrient-rich sediment. Is most attributed to high phosphorus levels. Is problematic for aquatic life and water quality. When severe, can lead to the production of cyanobacteria.

#### **Options:**

- · Aeration or fountain use may provide a partial remedy, but don't address the underlying cause.
- · Watershed-scale efforts: Raingardens, native vegetation, adopt-a-drain, or sound lawn care practices (more at vlawmo.org/ residents).
- In select cases, treatment to bind excess phosphorus: Alum, etc (with permit).

## **Filamentous Algae**



Also known as:

Macro-algae, pond scum, pond moss

#### Watch for:

Tangles of small filaments of green or greenish-brown material. Can appear as a mat of wet wool or cotton candy. Will wrap around or fall off a stick. Usually free-floating but can be rooted.

#### Notes:

Grows at bottom of pond/wetland and rises to the surface. May repeat rising/sinking cycle multiple times in a season. Usually stays close to shore where sunlight reaches the bottom.

May look unpleasant but is a normal part of aquatic ecosystem that fluctuates with temperature, rainfall, and nutrient levels. Not harmful or a concern to wildlife, people, or pets.

#### **Options:**

- Manual raking
- Treatment may be possible with approval and permit. Copper sulfite is commonly used but is toxic under MN Department of Health.

## **Macrophytes**



Watch for:

A stem, branches, or leaves. May or may not break the water's surface. Usually rooted but can be free-floating.

#### Notes:

An important part of aquatic ecosystem providing food and habitat for insects, fish, and birds. Can be dense to the point of hindering boat movement and fishing in shallow lakes and wetlands. Includes tiny, floating plants that cover the surface such as duckweed, watermeal, and spatterdock.

#### **Options:**

- Harvesting under 2,500 sq ft or spanning less than 50 ft of shoreline. (Permit required if exceeding).
- Treatment may be possible with permit and may be recommended for specific Aquatic Invasive Species (AIS).
- Adjust expectations for shallow freshwater or wait until plant growth declines with the change of weather.

For more info: www.pca.state.mn.us/water/frequently-asked-questions-about-lakes

**For more info:** www.dnr.state.mn.us/apm/index.html