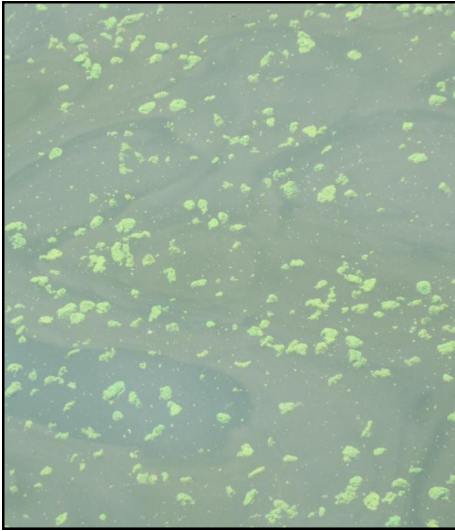


Visual Identification of Cyanobacteria and Green Algae and Duckweed

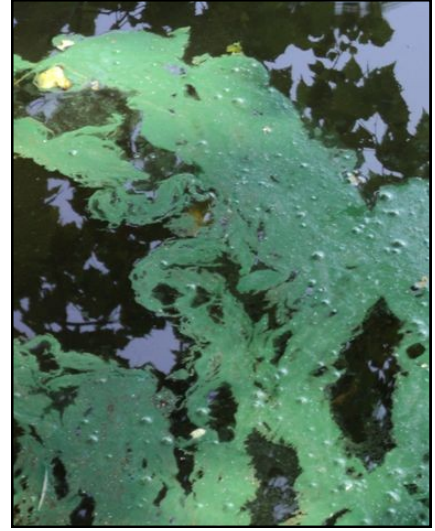
Cyanobacteria (also referred to as blue-green algae)



Microcystis bloom



Anabaena bloom



Planktothrix & *Anabaena* bloom

Cyanobacteria can be distributed throughout the water or they can float to form scums on or near the surface. The cells of many cyanobacteria group together to grow in colonies. Blooms can look like slicks of opaque, bright green paint, but closer inspection often reveals the grainy, sawdust-like, appearance of individual colonies. Blooms mixed throughout the water column can resemble pea soup. While most cyanobacteria in Ohio have their namesake blue or greenish coloration, they can also appear yellow, brown, purple, red or white. As cyanobacteria begin to clump together and decompose they can produce gases that often have a “swampy” or “freshly cut grass” odor. Some cyanobacteria are capable of producing algal toxins.

Green Algae & Duckweed



Cladophora bloom



Spirogyra bloom



Duckweed

Not all algal blooms or surface scums are cyanobacteria. Some green algae like *Cladophora* and *Spirogyra* can also create large blooms, but they do not produce harmful algal toxins. Green algae come in many forms and may look like underwater moss, thick stringy mats or floating slimy scum. Duckweed are tiny aquatic plants with a grainy or couscous-like texture. They may resemble miniature lily pads and are generally beneficial to the environment.

Additional information on bloom identification is available in Ohio EPA’s Bloom Characterization Guidance