

Simplified HAB Field Identification Instructions

Identify Presence or Absence of a Bloom

If the water is clear and you do not see signs of a bloom, please record the absence of a bloom and skip to Step 3. If you suspect a bloom, please proceed.

To begin, make sure the suspected bloom is not filamentous green algae or duckweed, two common and harmless aquatic plants.

A. Is this filamentous green algae?

Types of green algae can look a lot like cyanobacteria and grow in similar nutrient-enriched waterbodies. Unlike cyanobacteria, green algae may form long filamentous strands that make up silky “clouds” below the surface or viscous mats on the surface.

The stick test:

Find a sturdy stick or pole and pull it through the algae. If the stick pulls out strands that look like green hair or threads, the mat on the pond is likely filamentous green algae (non-toxic). If not, you may have a harmful algal bloom. (Source: Kansas Dept. of Health and the Environment)



Examples of filamentous green algae.

Sources: Clemson U. (L), NYS Department of Environmental Conservation (M, R)

B. Is this duckweed?

Duckweed are tiny aquatic plants with a grainy texture that can cover the entire surface of calm, nutrient-enriched ponds. If you collect them using a stick as you did in part A, you will notice their tiny leaves and root structures.



Examples of the aquatic plant duckweed.

Source: Ohio Environmental Protection Agency.

C. Is this a HAB?

Cyanobacteria blooms tend to take two forms: they can be suspended throughout the water column or form a thick scum on the surface.

Surface scums develop when the cyanobacteria begin to die and cannot control their buoyancy. **Be careful, these scums can be especially toxic!** These HABs are often described as looking like “spilled paint” or streaks on the water surface and may change color (green, white, blue, red, purple, brown) over time. Blooms forming in the water column can look like “pea soup,” green clumps or globules, green mats, or grass clippings.

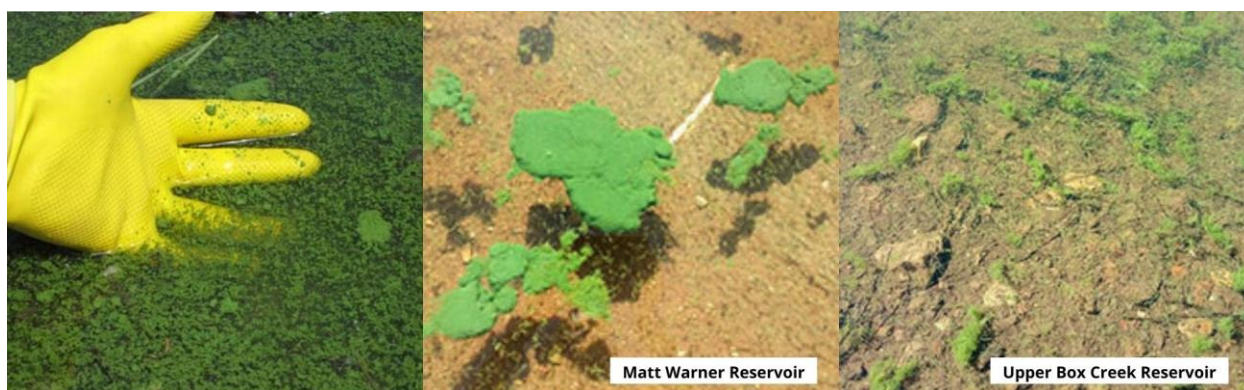
Find more photos examples of HAB types at <https://deq.utah.gov/water-quality/photo-gallery-harmful-algal-blooms-habs>.

Commonly identified cyanobacteria:



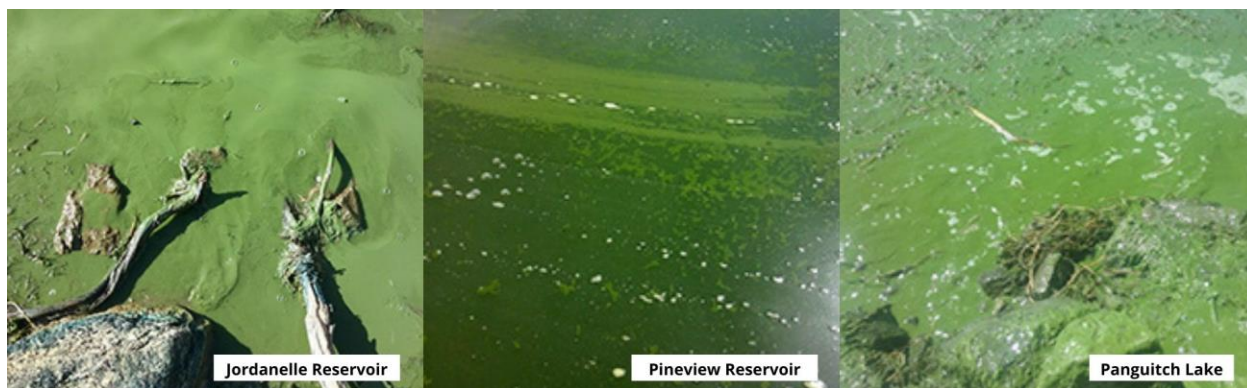
Examples of spilled paint HABs.

Sources: Utah Department of Environmental Quality; Utah County Health Department



Examples of clump or globule HABs.

Source: Utah Department of Environmental Quality



Examples of pea soup HABs.

Source: Utah Department of Environmental Quality



Examples of green mat HABs.

Source: Utah Department of Environmental Quality