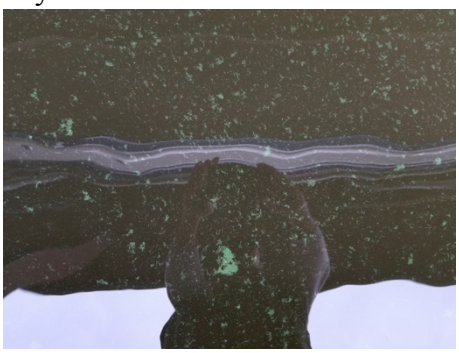
Algae Bloom Seen in SML

In early 2019, several residents of Smith Mountain Lake reported an increase in the amount of algae or "green stuff" they are seeing in the lake and especially along the shoreline. The Smith Mountain Lake Association (SMLA) took quick action to investigate these sightings, and several samples were collected and analyzed.

a) Green algae – The SMLA Water Quality Monitoring Program in 2018 reported the presence of green algae increased over the 2017 report; water appears to have a green hue. 56% percent of the algae found in SML in 2018 were green algae. Green algae are harmless and tend to dissipate after 24 – 48 hours. However, occurrences tend to increase with more frequent and heavier rainfall, which we have experienced throughout 2018 and into this year, providing increased nutrients within the runoff into the lake.

b) Blue-Green algae – One specific sample analyzed contained blue-green algae. Only 18% of algae found in SML in 2018 were of the Blue-Green variety that we would like to minimize in the lake because Blue-Green algae block sunlight from entering the water and have the potential of producing toxins after it dies. An example of blue-green algae may be seen on the right.

c) Hydro-seed materials – Bits of cardboard impregnated with fertilizer were found in more than one sample. This is consistent with hydro-seeding materials used for land restoration. SMLA strongly discourages the use of hydro seeding without having proper buffer landscaping to avoid run off into the lake



The seeding material can be seen in this picture:

NOTE: *The algae in the pictures shown above were tested in a lab to determine the type of algae. Unfortunately, different types of algae can look like the pictures shown and be of a different type than listed here. Only by testing in a lab can the type of algae be determined.*

Algae are present in all lakes and are essential for the ecosystem. In 2018, 26% of all algae found was very good Diatom algae, which are the primary food source at the base of the fish food chain. Diatoms also increase dissolved oxygen in the water.

When there is little to no boat traffic in the lake to keep the water churned, like during winter months, algae collects along the shorelines and in coves and therefore become more visible.

SMLA and the two Water Authorities on the lake will continue to monitor this situation. While being a bit unsightly, there is generally no cause for concern at this time.

Everyone that lives on or near the lake should consider taking steps to reduce nutrient runoff and sediment erosion from your properties, such as installing a buffer landscape above your riprap.

If you see a large accumulation of algae that does not dissipate in 24-48 hours please take a picture and email the picture along with the location of the algae and your contact information to Michael McCord at mccordsml@gmail.com, (SMLA Water Quality Monitoring). Michael is in direct contact with the Virginia Department of Environmental Quality (DEQ) who has established a Virginia Harmful Algal Bloom Task Force.