

Natural Places

Three years ago during one of my daily walks around Lake Elkhorn an incident from the past crept into my thoughts. It started as a peaceful recollection of more innocent times and became an unforgettable insight into my dad's wisdom.

I was 8 years old. I was with my dad and we were exploring a patch of rural wetland. I was barely able to keep pace with the strong young man I simply adored. Our path ran along a ridge near a nameless creek somewhere in southwest Louisiana. From not far up ahead, the slushy sound of ripples beyond a thorny briar patch suggested the little creek would soon join the Sabine River. Beside the briar patch, the creek's surface was carpeted green.

"What is that green stuff?" I asked, indicating the collection of floating color.

"It's called algae," Dad said. "It's got other names. Maybe when you grow up, you'll be a biologist."

My mother wanted me to be a lawyer, but Dad said I was cut out to be a scientist. "I think they call it algae," he continued. "Maybe it's a breed of moss. *Everything green in the water is not algae.*" Dad was neither a lawyer nor a scientist, but with experience and a high school education he knew that regardless of their name, all things in nature have a proper place.

More than sixty years later, I am a retired microbiologist. "And yes, Dad; the term *algae* still confuses us."

Back to the Present

Dad was right, of course, and things like that haven't changed much.

Some people have their own meaning for words and phrases like algae, algal blooms, and harmful algal blooms.

Simple definitions:

Algae are a large group of plants that are mostly aquatic and mostly very small.

Algal blooms are rapidly expanding masses of cells (including algae or cyanobacteria). They appear rapidly or persistently in an eutrophic water body.

Harmful algal blooms are algal bloom that that can produce toxins, make water taste bad and may have other harmful effects.

Local Harmful Algal Blooms

My daily routine includes a brisk walk, usually around Lake Elkhorn. At times, like other proud Columbia homeowners, I simply enjoy the clean and peaceful scene that always includes bikers, joggers, other walkers and at least one species of exotic bird. At other times, my academic background forces me to look closer.

Most of the time the lakes and ponds do look clean and healthy. Other times not so much.

Over the past year, I have observed and reported algal blooms in Lake Elkhorn and a local retention pond. Fortunately, the blooms I reported did not have elevated toxin levels.

Several other local lakes have been less fortunate. For example, in July and August of 2017, Lake Frank and Lake Needwood in Montgomery County experienced harmful blooms that included microcystin.

[<https://www.nbcwashington.com/news/local/Algae-in-Montgomery-County-Lakes-436563273.html>]

In February 2016, local residents reported a terra-cotta-red algae bloom in Lake Anita Louise, a retention pond near New Market in Frederick County. Maryland Department of the Environment subsequently reported the lake water contained microcystin at “more than 15 times the safe limit”. Read more about community action at <https://www.cleanwateraction.org/2017/06/30/protecting-lake-linganore-frederick-citys-drinking-water>].

Questions, Suggestions and Comments

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