Suspected blue-green algae blooms early on Prior Lake

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The dog days of summer — and dangers to real dogs — appear to have arrived early on Prior Lake.

Residents spotted what looks like blue-green algae this week in Harbor Bay, on Lower Prior Lake. Blue-green algae can contain microcystin, a toxic byproduct.

“The entire water has a light blue film in it — I’ve never seen it like this before,” said Tina Marquess Albright, who saw the swirling turquoise gunk go from bad to worse almost overnight on June 8 and 9.

Jaime Rokney, water resources specialist for the Prior Lake-Spring Lake Watershed District, saw the pictures that Albright took in the bay, while she can’t confirm it without testing, the images do look like blue-green algae.

“I was a little shocked when I saw that,” said Rokney, who was out on Prior Lake the day before receiving Albright’s pictures and didn’t see anything suspect.

“I would recommend keeping all animals and humans out of the water, and especially keep dogs on a close watch since they do not care about scummy water and can die if they drink it — if it is indeed toxic,” Rokney said.

This photo was taken June 9 on Lower Prior Lake in Harbor Bay.

While humans don’t usually feel an urge to drink or touch such nasty-looking water, kids might need extra supervision, she said.

Cyanobacteria, better known as blue-green algae, is potentially harmful, even fatal, to pets and humans. It tends to appear on unhealthy lakes with excess phosphorus.

Upper Prior and Spring lakes made the Minnesota Pollution Control Agency’s “impaired” water bodies list in 2010, but Lower Prior is not listed as impaired. Rokney said it could be a case of high phosphorus limited to a bay, where the water doesn’t mix much with the rest of the lake.

The potential dangers stems from microcystin, a toxic byproduct of blue-green algae. The concentration of microcystin can vary greatly, show up quickly and then diminish. The appearance also can vary, from a turquoise swirl to a full-on pea-soup consistency and rotten egg smell.

But worse than appearance and smell, of course, is the potential for people and pets to get sick or even die if they ingest the water. In late May, a 10-month-old dog died and another got sick after swimming in Red Rock Lake near Alexandria, Minn. The MPCA hasn’t yet confirmed the presence of blue-green algae in that lake, but a representative told local media that “it’s not unheard of” for the algae to bloom so early. According to the Prior Lake-Spring Lake Watershed District, algal blooms are more common in late summer/early fall (those “dog days” of summer) — but can occur any time of the year, even as early as April and as late as October.

Dogs are quickly affected and can suffer liver failure and seizures. In humans, exposure to microcystin can lead to vomiting, diarrhea, fever and cramps if ingested, or irritation to eyes, ears and throat if contact is made with skin.

Because of algae’s changing nature, testing also is tricky, said Rokney. Not all blue-green algae has microcystin, the toxin, but it’s best to assume it does.

Rokney said the watershed doesn’t usually test suspected algal blooms simply because it can take a week to get results from a Florida lab — and by then, the results could be invalid.

“Even if the result shows no microcystin was in the water, the microcystin could be in the water a week later, or vice-versa,” Rokney explained.

In August 2012, the Prior Lake-Spring Lake Watershed District collected a sample from the Spring Lake outlet to Prior Lake after receiving several phone calls from concerned citizens about the presence of algae there. The sample was tested and test results indicated that microcystin levels were 54 parts per million. While there is no formal microcystin monitoring program or health standards in the state of Minnesota, the test results from the Spring Lake outlet did exceed the suggested levels that put humans and animals at risk.

The watershed also embarked upon a multi-year treatment of Spring Lake, which flows into Upper Prior and on through the Prior Lake outlet channel. In just a year, Spring Lake saw a dramatic drop in the level of phosphorus and an improvement in water clarity.

Stay safe

The Minnesota Pollution Control Agency and the state Department of Health recommend the following actions if you have concern about lakes with algal blooms:

- Avoid contact with lake water and lake scum.
- Fish caught from the lake should be eaten in moderation.
- If odors cause discomfort, leave the area if possible.
- Pets should not be allowed to swim in or drink water from the lake.
- Phosphorus loading should be decreased to reduce algal bloom frequency.