

What is A Blue-Green Algae Bloom?

Blue-green algae, or cyanobacteria, reproduce rapidly in fresh water when the amount of sunlight, temperature and nutrients are adequate. Within a few days a “clear” lake, pond or ditch can become cloudy with algae growth. This is called a bloom. Blue-green blooms usually float to the surface and can be several inches thick near the shoreline.

A blue-green bloom:

- Often looks like green paint floating on the water.
- Is made up of extremely small organisms that are hard to pick up or hold.
- Can be bright green, or bluish, brownish, reddish green, or white
- Is most common in the summer and fall but can occur anytime.

Although blue-green blooms can create nuisance conditions and undesirable water quality, **most blue-green blooms are not toxic.**

What is A Toxic Bloom?

Some blue-green algae produce toxins or poisons. Eventually the toxins break down and are destroyed naturally. Ingesting the algae while they are still poisonous can cause serious illness. Drinking water taken from a lake may be affected.

Signs of a toxic bloom may include:

- Large numbers of dead fish, waterfowl or other animals.
- Sudden, unexplained sickness or death of a cat or dog, especially if it has algae on its mouth, legs or feet.
- A skin rash in humans after being in the water.

What If I See A Bloom?

As soon as you notice a bloom or possible signs of poisoning:

- Avoid contact with water containing the algae.
- Keep pet and livestock away from the water.

Only special laboratory testing of water samples can confirm whether or not a bloom is toxic. These generally take several weeks to complete, at which time the bloom may be gone and/or the toxins may be gone.

Contact With Blue-Green Algae Can Be Poisonous

Get proper medical or veterinary attention right away if you or your pets or livestock have signs of poisoning.

Blue-green algae can produce nerve toxins and liver toxins. Signs of neurotoxin poisoning usually appear within 15-20 minutes after ingestion. In animals, signs include weakness, staggering, difficulty in breathing, convulsions and death. In people, signs may include numbness of the lips, tingling in the fingers and toes, and dizziness.

It may be hours or days before signs of liver poisoning appear. Liver toxins can cause abdominal pain, diarrhea and vomiting in humans and death in animals.

Poisoning is more severe the smaller the person or animal and the larger the amount of toxin ingested.

What Can I Do About It?

Algae blooms are likely to occur during sunny, calm weather when high concentrations of nutrients are present in the water. People can have a big effect on the amount of nutrients in the lake. Two important nutrients algae require are phosphorous and nitrogen. These are found in animal and human waste (sewage) and in fertilizers. Excessive amounts of nitrogen and phosphorus may lead to “nutrient loading” and eventually to an algae bloom.

To help decrease nutrient loading:

1. Maintain or restore native plants around lake shorelines and streams that feed the lake. Native wetland plants help filter water and don’t require pesticides or fertilizers for maintenance.
2. Be extremely cautious with lawn and plant fertilizers and pesticides. Don’t over-water, over-fertilize, or use more than the recommended amount of pesticides.
3. Improperly operating or damaged septic systems are a major cause of nutrient loading into nearby water. Proper care and maintenance of your septic system is essential. Have your system pumped and inspected every 3-4 years.
4. Prevent surface water runoff from agricultural and livestock areas. Do not allow livestock to drink or defecate in streams or lakes. Don’t feed water fowl.
5. Take steps to prevent erosion around construction and logging operations. Erosion can carry nutrient-rich soil into nearby lakes.

To report a blue-green algae bloom that isn't posted, call the nearest Forest Service Office or the Army Corps of Engineers Office.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.

TOXIC



BLUE GREEN *algae* BLOOM



If you . . .

- enjoy lake activities such as swimming, fishing, boating
- graze your livestock near a lake or pond
- are a lake resident
- are veterinarian

. . . you may be able to help prevent a health threat to people and animals from toxic blue-green blooms.

**In their toxic form
blue-green algae can kill pets, waterfowl,
and other animals.
They can also cause serious illness in humans.**

You can help by:

- Learning how to identify and avoid contact with a bloom.
- Reporting unposted algae blooms to your local Forest Service or Army Corps of Engineers Office.
- Decreasing “nutrient loading” in lakes and streams.

