



# Algae in Severn Sound Area Lakes: Quick Identification & Reporting Tips

## What is Algae?

- Microscopic, single-celled plants
- Exist as single cells, or as groups of cells in colonies and filaments
- Can live suspended in water (phytoplankton) or attached to rocks (periphyton) or plants (epiphyton), or grow as macro algae (plant-like, anchored in lake sediment)
- Vital component of aquatic food web
- Respond to light, nutrients and water temperature, and can grow in nuisance and/or harmful amounts

## Algae Types

- In the Severn Sound area, six major groups are commonly found in local lakes: Blue Green algae, Green algae, Diatoms, Chrysophytes, Dinoflagellates, and Cryptomonads
- Algae can take many different forms:
  - Free Floating or Surface Slick (single cells & colonies)
  - Attached or Mat Forming (filaments & colonies)
  - Macro algae (plant-like)
- The same type of algae can occur in multiple forms (e.g. free floating and mat forming)
- Most algae are non-toxic, however some species of Blue Green algae can produce toxins that are harmful to humans and animals
- This ID card will help you distinguish between common forms of Blue Green and Green algae, and common look-alikes

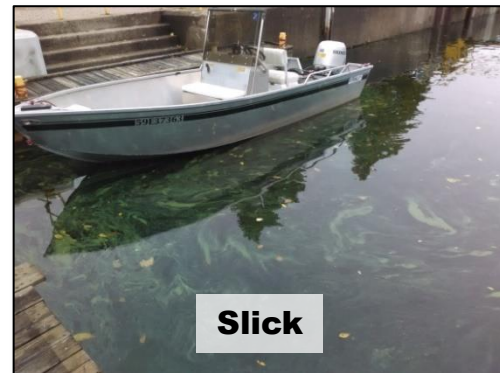
## Blue Green Algae



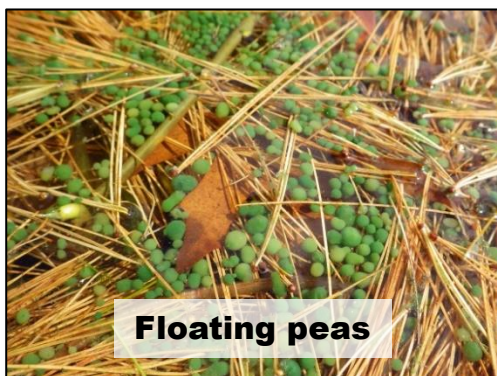
**Fingernail clippings**



**Floating blueish specks**



**Slick**



**Floating peas**



**Slick**



**Frog skin**

### Visual clues for different types of Blue Green algae:

- Bright blueish green colour
- Paint slick or floating specks
- Fingernail clippings
- Peas
- Frog skin
- Can have strong odour

**Can produce toxins**

### If you suspect a Blue Green algae bloom:

- Call the Ministry of Environment Conservation and Parks Spills Action Centre: 1-866-MOE-TIPS
- Assume toxins are present and avoid using, drinking, bathing or swimming in the water, and restrict pet and livestock access to the water (note: boiling does not get rid of toxins)
- Contact the Simcoe Muskoka District Health Unit for information on health risks

## Resources

- Provincial Blue Green Algae Fact Page - [www.ontario.ca/page/blue-green-algae](http://www.ontario.ca/page/blue-green-algae)
- Blooms in Simcoe-Muskoka Area - [www.simcoemuskokahealth.org/Topics/SafeWater/bluegreenalgae\\_copy1.aspx](http://www.simcoemuskokahealth.org/Topics/SafeWater/bluegreenalgae_copy1.aspx)
- Algae in the Severn Sound Area - <https://youtu.be/dRKS3hIGGUE>

# Green Algae



**Filaments on rocks**



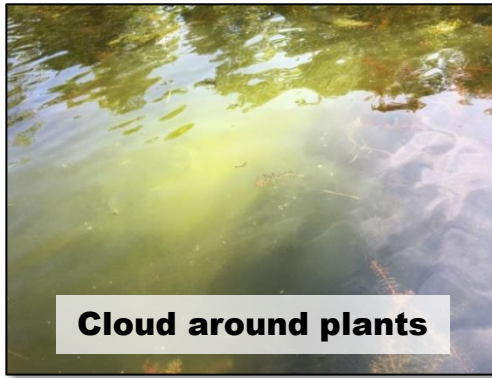
**Cloud around plants**



**Filaments on rocks**



**Ring around rocks**



**Cloud around plants**



**Floating mat**

## Visual clues for different types of Green algae:

- Dark to yellowish green colour depending on type and age
- Stringy or woolly, mat-like
- Cloudy-like, often around aquatic plants
- Bubbles embedded in thick mats
- Stringy ring around rocks

**Non-toxic**

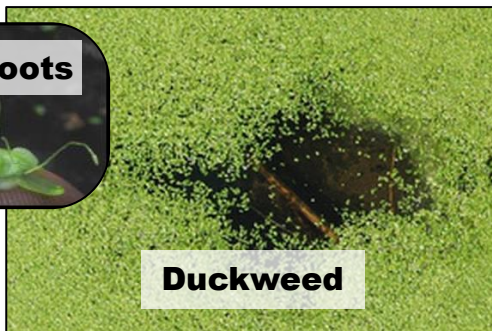
## Non-Algae Look-a-likes



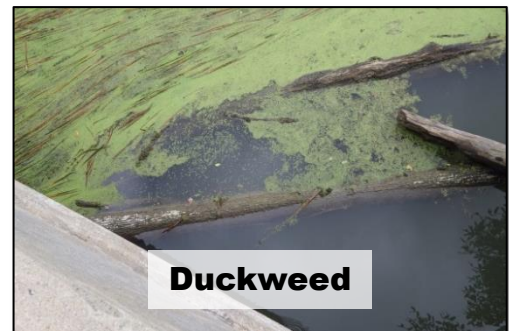
**Duckweed**



**Roots**



**Duckweed**



**Duckweed**



**Pine pollen**



**Floating plants**

More Info: [www.severnsound.ca](http://www.severnsound.ca)

@severnsoundea

@SSEA\_SSRAP

YouTube

705-534-7283

Note: This guide is not meant to be exhaustive. If in doubt, call the Spills Action Centre.  
Produced by: Severn Sound Environmental Association, 2021

