Phytoplankton – Green-Celled Wanderers

What are they?
Phytoplankton are actually very tiny small plants. Algae, diatoms, and bacteria are phytoplankton.

What do they look like?
One drop of Bay water may contain thousands of individual phytoplankton! They are microscopic plants, basically made up of only one cell. Many of them do clump together, though, to form large mats that you can see. One mat might be made up of billions of phytoplankton.

Where can you find them?
Even though you cannot see these plants without a microscope (many of them contain only one cell), you can see evidence that they are in the water. Some kinds of algae make the Bay water a kind of brown-green.

Since they are plants, phytoplankton need sunlight to produce their food. So most of them like to live near the surface of the water.

How do they behave?
Phytoplankton cannot swim, so they move about by “riding” on water currents and tides. Their name comes from a Greek word (planktos) meaning “wander” or “drift.”

What do they eat?
Phytoplankton produce their own food through photosynthesis. Because of this, they are called producers. Producers make their own food; consumers eat food produced by others.

What eats them?
Phytoplankton are at the base of a very long food chain. They are eaten by zooplankton, tiny animals in the Bay and many other animals, including fish, ducks, and filter feeders such as oysters.

Creature Feature
Too much of a good thing is … too much. Even though phytoplankton are very small, they can grow rapidly, creating algal blooms that block out the sunlight from underwater grasses. As these masses die off and sink to the bottom, the phytoplankton decompose, using up a great deal of available dissolved oxygen. This makes things even worse for the underwater sea grasses and Bay creatures that all depend on that oxygen.