WHAT IS THAT FLOATING GREEN ALGAE ON THE LAKE?

The now clear Lake Belle View is currently experiencing a filamentous algae bloom unlike previous years when benthic algae blooms carried a strong stench and invasive carp roiled the waters muddy. Some growth of this type of algae is expected because the lake is in an early stage of restoration.

Filamentous algae are single algae cells that form long visible chains, threads, or filaments. These filaments intertwine forming a mat that resembles wet wool. Filamentous algae start growing along the bottom in shallow water or attached to structures in the water like rocks or other aquatic plants. As this alga breaks loose, it often floats to the surface where it forms the dense mats now being seen.

Filamentous algae growth often occurs in spring and early summer when water temperatures are cool and precede rooted plant growth. Filamentous algae provide habitats for many small insects, worms and crustaceans. Both the algae and small critters that inhabit the plants are food for a number of small fish species. Unlike planktonic blue-green algae, which grows throughout the water column often making water appear to look like pea soup, filamentous algae is not known to produce the toxins that can be dangerous to both animals and humans.

The newly formed off-channel Lake Belle View is in an early transitional stage of the ongoing restoration with only minimal growth of submersed and floating leaf plants, such as native pondweeds and water lilies. Seeing some filamentous algae is not unexpected when competition from rooted aquatic plants is lacking and when nutrients are available from the recently exposed lake sediments. Growth often diminishes as the summer goes along, depending on the extent of rooted plant growths. Longer term, as the rooted plants get established and compete for nutrients, this type of growth will diminish.

Over a period of several years, the amount of available nutrients in the lake will also diminish as the low nutrient groundwater (spring water) entering the lake washes out the nutrients currently present in the lake.

Even after rooted plants become established and low nutrient groundwater inputs become more dominant, there will always be some growth of this type of algae, but it will be much more limited than is currently present.

Control Option: The current bloom of Hydrodictyon (a filamentous algae) is being evaluated to see if control by harvesting is warranted. Although this algae is currently providing habitat needed by minnows and other forage fish to feed and reproduce, if it remains excessively dense and does not soon diminish, it potentially could result in killing recently re-introduced fish by depleting oxygen in the water as it decomposes.

FILAMENTOUS ALGAE

AQUATIC PLANT HARVESTOR