Oily Biofims on Pond Surface

Causes:

- Trees and flowers can leave a surface film on ponds as the wind broadcasts the plant pollen in the spring and fall.
- Oils are produced by decaying plant life (weeds, leaves, algae) which cause an oily sheen on the surface of ponds. The biofilm forms when this organic matter dies at a faster rate than can be degraded by the natural bacteria in a pond. This process occurs more often in the warmer months.

Characteristics:

- Biofilms can appear suddenly, showing up on a pond later in the afternoon when previously clear earlier in the day. Biofilms can shift across the pond pushed by the wind toward one side, building up in the corners. Biofilms can also disappear, getting pushed down, by rainfall.
- Biofilms can be white/gray, brown, green or yellow.
- Biofilms can be unsightly, but generally not harmful.
- If a stick is poked into the film and the oily spot seems cracked or fragmented and does not re-form, it is likely a biofilm. If the spot swirls back onto itself in the wake of the stick, it is likely a hydrocarbon oil.

Controls:

There has been limited research into pond biofilms and mixed results regarding treatments such as:

- Increasing the pond's ph by adding lime since biofilms can be found in ponds with a lower ph
- Adding beneficial bacteria to aid in the decomposition of the organic matter
- Adding pond aeration to break the surface tension and add oxygen to aid in decomposition

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