# **AQUATIC MIDGE FLIES**

Order: Diptera
Family: Chironomidae
Genus & Species: 2000+
species in North America

#### **Habitat**

- Bodies of water 3'-30' deep
- Lakes with excess organic waste from landscaping, turf, reclaimed water, paved surfaces, septic tanks, and other watershed sources
- Ponds with low oxygen conditions that allow waste products to release ammonia, hydrogen sulfide gas, phosphorus and other nutrients
- Water with higher levels of muck accumulation, murky color, bad odors
- Ponds with excessive blue-green algae and phytoplankton

### **Control Methods**

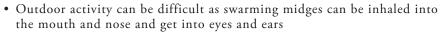
- Increase oxygen in the lake with an aeration system
  - Destratifies lake bottom
  - Increases beneficial bacteria
  - Reduces nutrients
- Use larvacides as needed
- Treat algae quickly to avoid creating more problems
- Add fish that feed on midge larvae

## Are swarms of bugs keeping you inside?

Aquatic midge flies are non-biting insects found in lakes and ponds throughout Florida and are known by many common names including blind mosquito and fuzzy bill. They do not bite, suck blood, or carry disease like true mosquitoes do, so they are more of a nuisance than anything.

Midge flies are a food source for other aquatic insects, such as dragon fly nymphs and several varieties of fish, so the goal is not to completely eliminate them, but to keep them in proper balance within the ecosystem. Midge fly populations grow exponentially in water that is high in nutrients and bottom muck, and low in oxygen, environments that don't support fish.

- Can be a problem in Florida all year but swarms tend to be worse in the spring and early fall
- At night they are attracted to lights around houses and businesses



- Swarms fly to cool shady areas & stain paint, stucco, roofs, cars, etc.
- Small & large pond and lakes, whether natural or man-made
- Larvae live on and in the lake bottom making them more difficult to control and to detect imminent adult swarming

#### What can be done about them?

Shorter term control with fast results includes applying larvacides to the lake to prevent midge flies from developing into flying adults.

For longer term control, you need to improve the water quality of the lake. As lakes age many develop layers of organic bottom muck that dramatically lowers dissolved oxygen levels favoring growth of midge fly larvae while preventing fish and other insect predators from feeding on them. Infested lakes can easily support populations of 2,000 larvae per square meter.

Lakes low in oxygen and high in nutrients, pollution and algae are a perfect habitat for midges. The most effective long term remedy for midge flies may

be installing a Vertex diffused air aeration system to raise oxygen levels and improve overall water quality. Call Aquatic Systems for a free site survey and consultation on the best solution for your swarming midge fly problem.



