

CAPITOL BEACH COMMUNITY ASSOCIATION 2006 Midge Control Plan

The Spring outbreak of Midges was expected to occur in mid to late May depending on the water temperature. However due to the mild winter and early spring warming the midges started to hatch (30-45 days) before the midge control program was to be implemented. Therefore the program will be implemented immediately.

The plan outline for this year is as follows:

- Sample the lake bottom to determine the density and primary location of the midge larvae.
Tentative date April 24-29
- Treat the lake bottom with the recommended chemical at the rate of application as recommended.
Tentative date subject to sampling results May 7-13
- Resample the lake bottom 2-4 weeks after treatment to determine the effectiveness of treatment.
- Retreat lake bottom as needed (may take up to 3 applications).
- Stock fish as recommended by supplier. Spring stocking April, 2006, approximately 130,000 stocked. Summer and Fall stocking to be determined.
- Advise the homeowners of chemicals and methods they may use to safely treat their yards with out toxic effect to the lake and the fish. **See information below.**
- Maintain close communications with local and state officials as to our methods of control and products used.

What can homeowners do to help the midge problem around their house and to reduce reinfestation of the lake.

- Use phosphorous free fertilizer. Phosphorous promotes the growth of midges and other undesirable aquatic live such as algae.
- Use yellow out side lights to reduce light attraction.
- Keep bushes and grass trimmed.

If a homeowner desires to treat their lawn or house some of the options are :

- Call the County extension office for recommendations 441-7180.
- Several residents had some success using “Mosquito B Gon” it last year. Remember to always read the label and follow the manufacturer’s directions. Glenn Hillhouse reported:

“In March, I called Ortho’s 800 phone number and asked for a mosquito spray that is not harmful to small fish. They suggested ”Mosquito B Gon.” The Ortho representative said it should not be sprayed into the water or within 10 feet of water. If it rains and any chemical is carried toward the water, by the time it reaches the water’s edge, it is so reduced that it is not harmful to little fish.”

- Contact a local Pest Control company to treat your yard and house. (Midges are not hard to kill, they will live for 3-7 days in your grass, bushes and trees during the day. Midges do not eat as adults, they mate and females lay one batch of eggs (1500-3000) then spend the rest of their life cycle being pests.)

FYI

MIDGE LIFE CYCLE

There are four stages in the life cycle of chironomid midges. Eggs are laid on the surface of the water. Each gelatinous egg mass may contain up to 3,000 eggs depending on the species. Eggs sink to the bottom and hatch in several days to one week. After leaving the egg mass, larvae burrow into the mud or construct small tubes in which they live. Larvae enlarge their tubes as they grow. Suspended organic matter in the water and in the mud is used as food by the developing larvae. After they grow, the larvae take on a pink color and gradually turn a dark red. Consequently, mature larvae are commonly called "blood worms". The red color results from an iron containing compound, haemoglobin, that is in the midge's blood. The haemoglobin allows the larvae to respire under low dissolved oxygen conditions in the bottom mud. The larval stage can take from less than 2 to 7 weeks depending on water temperature. Larvae transform into pupae while still in their tubes. After 3 days, pupae actively swim to the surface, and adults emerge several hours later. Adults mate in swarms soon after emerging. Because they do not feed, adults live for only 5 to 7 days.

During summer, the entire life cycle from egg to adult can be completed in 3 to 4 weeks. In the fall, larvae do not pupate, but they suspend development and pass through the winter months as mature larvae. Pupation and emergence of adults occurs the following spring in late April or early May. Several more generations of midges will be produced throughout summer, resulting in mass emergences of adults. In each generation, adults will typically emerge in large numbers for several weeks.

