

## **Phorid Fly Meeting with Bob Johnson of Mushroom Central**

**Monday, August 29, 2016**

A meeting with Bob Johnson of Mushroom Central was held at 5:30 PM on Monday, August 29, 2016. The purpose of the meeting was to exchange learnings about Phorid flies and get input from residents whose homes had been treated by Mushroom Central for Phorid flies using a synthetic pyrethroid. Attendees included Bob Johnson (Mushroom Central), Les Clarke, Joan Feldpush, Barbara and David Runkle, Roy Schuyler, Lou Taylor and Margo Woodacre.

Bob noted that he used a net to capture insects in locations throughout Harrogate North. He commented that he captured Phorid flies, leaf hoppers and other insects. The leaf hoppers are small and will bite; however, they will not enter homes. Bob also commented that although he saw an extraordinarily large number of insects in the lawn at Harrogate North, only a small fraction were Phorid flies. This large number of insects, to some degree, is to be expected because we did not have a hard freeze last winter.

We discussed the source of the Phorid flies we are experiencing in Harrogate North. Bob noted that the flies are definitely not coming from our basins or bio-basins. The flies may be coming from the direction of St. Anthony's. The flies may also live and breed within Harrogate North in some (but by no means all) grass or mulched areas. If so, they are randomly distributed.

Bob also commented that the Phorids we are capturing in Harrogate North are not the same type as the ones present in the Kaolin mushroom houses. Hence, the mushroom houses around Harrogate North are not likely the only source, or even a major source of the flies we experience. Further, Bob noted that the fans heard in the mushroom houses are similar to the fans on residential air conditioner compressors. They are part of a commercial air conditioning system used to keep the mushroom houses cool. Hence, they do not exhaust flies from mushroom houses and send them our way.

Bob noted that, as adults, the female Phorid flies need to eat. Hence, they are attracted to aphids, primarily because of the "honeydew" they excrete. They are

attracted to ants because of their pheromones. Phorids are also attracted by the color blue (for example, blue flowers). One possible reason why Phorid flies are prevalent in some homes but not others is because there is something in the homes with flies that attracts them.

Temperature will also influence where flies want to go. On very hot days, they will attempt to find cooler temperatures. As weather gets colder, they will seek warmer temperatures. In such cases, they will typically enter the attic spaces in homes through the soffit vents. As winter proceeds, two full weeks at or below freezing will knock Phorid flies out for the year.

Discussion took place regarding how we could develop some political support for controlling Phorid flies in residential areas. The current support is directed at controlling Phorid flies, because of their negative impact on profits in the mushroom industry. Bob commented that he is on an advisory board at Penn State that is relevant to this issue. He was not optimistic that this board will be of assistance to us. Margo noted that Phorid flies are a problem in many communities within New Garden Township. As such, to gain political support, our first point of contact should be New Garden Township through Tony Schievert. In any case, it is very unlikely that such political support will be helpful in solving our problem in the near term. It will likely take years to develop. **The Board will take responsibility for contacting Tony Schievert.**

Bob said that the soap spray treatment (e. g., Dawn, Joy) used by some residents to control Phorid flies works by smothering flies. It has no residual effect. Bob said that soap treatments would need to be repeated daily. Lou Taylor commented that in his case the soap treatments needed to be repeated more than once a day.

Bob Johnson of Mushroom Central talked about the synthetic pyrethroid treatment he performed as a test on three homes in Harrogate North. This test was to consist of two treatments on two homes for two months. The third home (101 Cornwall) was added later. Bob treated both the structure (siding and soffits) and the surrounding grass. He noted that the treatment deposits a barrier film that persists for 29 to 30 days. If the flies come in contact with the

film, they will die. The homes treated were 120 Hyde Park (Woodacre), 101 Cornwall (Runkle), and 202 Crescent (Druding). Bob noted that if a soap treatment is used following the application of the pyrethroid, the pyrethroid film will be removed and will no longer be effective. Hence, the soap treatment could be used before the pyrethroid application, but not following it.

Following the pyrethroid treatment of her home, Margo noted some reduction in the number of flies present in her home. The Drudings noted a similar reduction. The Runkles treated their home with several chemicals and did note a reduction in the number of flies. Both the Runkles and the Drudings used a soap treatment on their homes following the pyrethroid treatment by Mushroom Central.

The consensus at the meeting was that another test of the pyrethroid treatment may be needed to test its efficacy. Treatments would need to be made on selected homes to determine to what degree the treatments are effective. **The Board will take responsibility for determining whether this test should be repeated and if so getting this test done.**

Beyond FlyWeb Fly Lights inside homes, sealing possible fly entry points in homes, and either using a soap treatment or a synthetic pyrethroid treatment on the exterior of homes, several actions can be taken to make grassy areas less attractive to Phorid flies and other insects. Barbara Runkle suggested removing thatch as an option. Bob noted that thatch should be no more than ½ inch deep. Bob suggested having our landscaping contractor do a flea and tick treatment of grassy areas in Harrogate North. He noted that this would also, provided they are present, control ants and Phorid flies. The flea and tick treatment would need to be repeated several times to be effective. **The Board will follow up with our landscaping contractor to determine whether this treatment would be, in their opinion, effective, and if so, what it would cost. The Board will also use an expert to determine whether dethatching is indicated.**

If the grassy areas are treated for fleas and ticks, it may impact whether the pyrethroid tests on selected homes (see the paragraph above) are still indicated. Bob noted that for homes with serious Phorid fly problems, both the grass and the house (especially the soffits) should be treated.

Several questions were suggested for inclusion in the Phorid fly survey to be conducted for the second time later this year. For example: Do you use a pest control company to treat outside your home, and if so, for what are you treating? A second suggestion was: Are you using FlyWeb Fly Lights and if so, what is your experience with them? **The Board will take responsibility for making sure that the survey is conducted later this year.**

The meeting concluded at 7:30 PM.

NOTE: These minutes will be distributed to all Harrogate North residents through the Harrogate Happening.