

Statement of Work

Phorid Fly Action Committee (PFAC) Mission Statement

The mission of PFAC is to educate residents, government officials and government agencies about the phorid fly. PFAC welcomes all residents who are suffering from this fly invasion of their homes. We support and take action in defense of our property, offer and assist government agencies, state officials, community organizations and academic research in the eradication of this infestation.

Purpose:

To mitigate the phorid fly (***Megaselia halterata***) population in our community. Our goal is to make this community uninhabitable and less desirable to phorid flies and more livable and pleasant for the residents. This request is to mitigate the phorid fly infestation experienced in the last few years while accepting that the result will not be total eradication.

Current Knowledge:

PFAC has been meeting on a regular basis with Tony Scheivert, New Garden Township since November 2016. At our last meeting, on January 17, 2017. **Michael Zuk, Mushroom Farm Conservationist, Chester County Conservation District**, stated that while the current practice for the mushroom houses is to steam pasteurize the growing material going into and out of the houses, **THEY DO NOT STEAM PASTEURIZE THE STUMPS.**

He then stated that he had spoken with a vendor who was contracted to remove this stump material from the houses and the truck driver reported that this stump material was fully infested with phorid flies. This contaminated stump material can be spread on farm fields, and it is also mixed into black mulch. Michael and his team are currently in the process of reviewing the **Best Practices for Environmental Protection in the Mushroom Farm Community #252-5401-001** guide to address this issue, and PFAC made suggestions to him, which he accepted.

Current findings from **Penn State University** about the Phorid flies, **Dr. Nina Jenkins**, as of December 19, 2016:

- They emerge from mushroom compost
- They are attracted to light
- They swarm over grasses to mate
- They have discovered that mating pairs somehow create an “excitement peak” which may contribute to swarming behavior

Also, in discussions with knowledgeable parties and research of published papers and articles it is known that phorid flies are present in mulch and turf. Homeowners in Harrogate North also reported mushrooms growing from the black mulch and evidence of spores in the soil below this mulch. In order to remediate the mulch, it will be necessary to remove it and along with some soil (1 inch) and then treat the beds with an insecticide to help ensure no flies or larvae survive. Cedar mulch is used in areas that are prone to insect infestations, such as ants and termites. In addition it has been strongly recommended the community turf should be treated with an insecticide, such as a flea and tick pesticide (for example: BISECT) to ensure that any phorid flies resting in the grasses and while mating would be killed.

The Benefits of Cedar Mulch

Unlike many other types of organic mulch, 100 % cedar mulch decomposes slowly, taking years to break down, so it needs to be replenished less frequently. The resins in cedar mulch emit a pleasant scent. Cedar has natural pesticide properties and may keep certain types of insects away from plants.

Recommendations:

- **Mulch Remediation Program**

- Remove all existing black mulch from all landscaped beds, community trees, and bushes
- Remove up to 1 inch of existing soil, where removal of 1 inch of soil is not possible, remove as much as possible.
- Treat all now exposed soil with a pesticide, such as BISECT (flea and tick)
- Install **100%** Cedar Mulch

Recommended Vendor for this service: **Forever Green:** Already under contract

- **Turf Treatments**

- Include Integrated Pest Management to existing Lawn Service
 - This will include spraying all common areas with BISECT (Flea and Tick)
 - Recommended interval: Once a month, beginning in Spring 2017
 - Treatment lasts 28- 30 days.
 - **2016** Treatment Dates: Oct 24 & Nov 23.

Recommended Vendor for this service: **Green Fertilizer:** Christian Rising. Already treating 30 homes in the community with Turf Pesticide Treatments.