# HARROGATE TOWN MEETING Managing Phorid Flies

Wednesday, March 23, 2016

#### **Meeting Purpose**

Continue the process of educating ourselves regarding phorid flies and managing them as a community in a reasonable, timely, and cost-effective manner

## Agenda

- Opening remarks Les Clarke
- Problem description Roy Schuyler
- Political and agency support Pete Mrozinski
- How we plan to proceed Pete Mrozinski
- Q&A Les Clarke

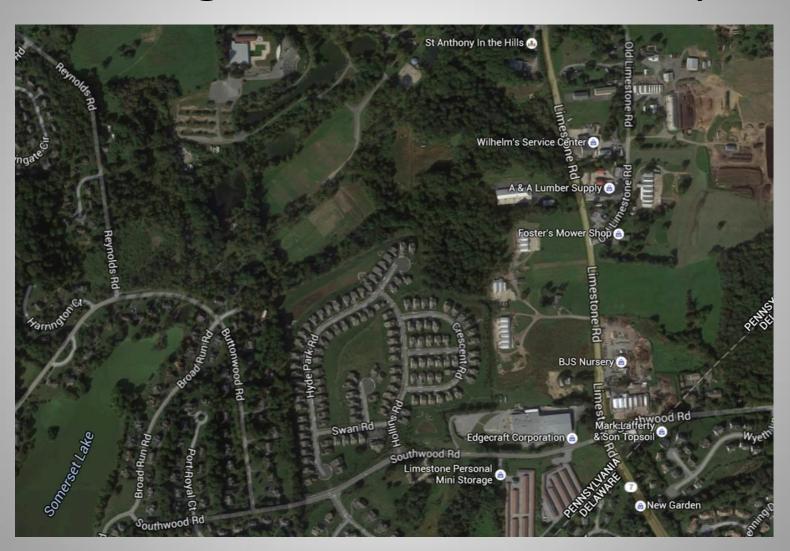
## **Problem Description**

- What we know and/or believe about phorid flies
- Our situation in Harrogate North
- What we don't know

## What We Know About the Flies

- Endemic to our area
- Require moist, decaying organic material to breed
  - Mushroom houses
  - Sewer treatment facilities
  - Storage locations for spent mushroom soil
  - Nursery wholesalers with organic mulch inventories
  - Natural areas

# Harrogate North Aerial Map



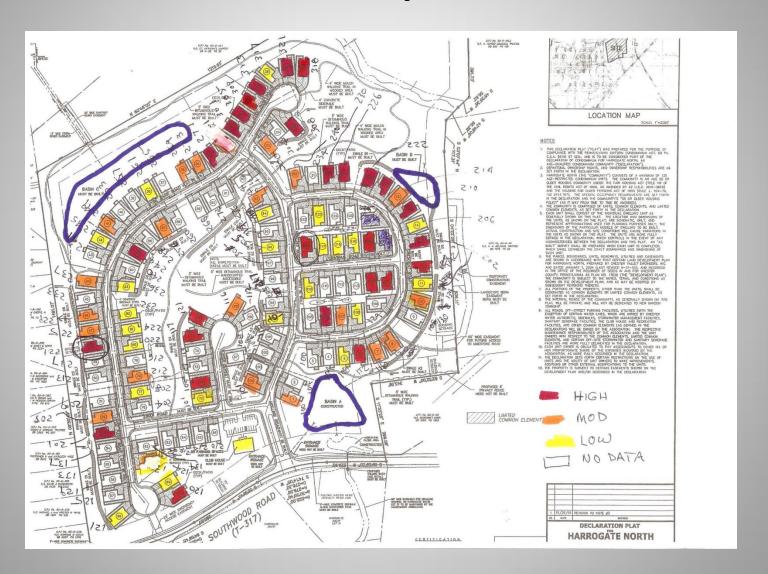
## What We Know About the Flies

- Endemic to our area
- Require moist, decaying organic material to breed
- Very poor fliers wind currents disperse them
- Active in warmer temperatures
- Multiply as the summer proceeds
- Become inactive outside with the advent of sustained cold weather

## **Our Situation**

- Infestations began in 2010
- 2016 survey of Harrogate residents
  - 30 homes seriously infested (25% of all homes)
  - 19 homes moderately infested (15% of all homes)

# 2016 Survey Results



#### **Our Situation**

- Infestations began in 2010
- 2016 survey of Harrogate residents
  - 30 homes seriously infested (25% of all homes)
  - 19 homes moderately infested (15% of all homes)
- Follow-up survey of seriously infested homes
  - Number of infested homes increased over time
- Infestations in 2015 ceased with cold weather
  - Flies breed outside and find their way inside

#### What We Don't Know

- Where are the breeding sites???
  - Mushroom houses??
  - Within Harrogate North
    - Mulch beds?
    - Basins, bio-basins, storm water drainage pipes?
- A reason for distribution of infestation severity
- Was 2015 infestation typical or an outlier?
- How long will it take to develop an effective fly management strategy?

## Political and Agency Support

- Resident attempts to solicit help from state and county agencies
- NGT Board of Supervisors Meeting –
   February 16
- Meeting with NGT Manager and MS4 Coordinator/Flood Plain Coordinator – March 14
- Meeting with State Senator Andrew Dinniman – March 17

# Meeting with State, County, and Township Representatives

- Meeting arranged by Tony Sheivert, NGT Manager
- Attendees
  - State Senator Andrew Dinniman
  - Two members of Senator Dinniman's staff
  - Tony Scheivert
  - Mike Zook Chester County Conservation District
  - Shelly Dehoff Ombudsman, Lancaster County Conservation District
  - Chris Barber Reporter, Southern Chester County
     Weeklies
  - Seven Harrogate North residents

## Some Key Learnings

- Harrogate residents' interactions with the township over the past several months have raised awareness of the issue
- Tony Scheivert has already committed a lot of time and effort
- Both the county and the state want to help
- Bureaucratic limitations

#### **Bureaucratic Limitations**

- Agencies with overlapping responsibilities
- Agencies not sharing information
- Agencies without enforcement authority
  - Chester County Conservation District is responsible to work with growers to develop "best practices" plans, yet has no enforcement authority
- Working through the bureaucracy will be time consuming

# Integrated Pest Management Committee of AMI

- Recent meeting attended by Tony Scheivert and a member of Senator Dinniman's staff
- Key learnings
  - Phorid flies are a major financial problem for the mushroom industry
  - Flies are expected to be worse this year
  - Limited availability of pesticides
  - Most growers are responsible, but some rogue facilities exist
  - Tony Scheivert held informal discussions at meeting
    - Large infestation in Harrogate North strongly suggests internal breeding sites
    - Storm water management system, particularly bio-basins, should be treated as potential breeding sites

## Path Forward

- State, county, and township will coordinate efforts to address fly issue outside of Harrogate North
- Agreement was reached to work directly with AMI
  - Tony Scheivert with help of Senator Dinniman's office
  - Industry wants to control phorid flies
  - Majority of growers are conscientious
  - Visit local growers to assure "best practices" are followed
  - Rely on industry pressure to get growers in line

## Path Forward

(Cont'd)

- Senator Dinniman agreed to personally reach out to university extension programs to identify expert academics
- Senator Dinniman's office and Tony Scheivert will coordinate efforts to enroll Harrogate North in a county-funded mosquito control program
- Harrogate North will continue with its program as planned
- Tony Scheivert will continue working with Harrogate North to assure our program meets township requirements and is effective

#### How We Plan to Proceed

- External to Harrogate North
  - Monitor progress of government agencies
  - Coordinate our internal efforts
- Internal to Harrogate North
  - Assume there are phorid fly breeding sites within the community
  - Specific sites unknown
  - Continue to seek help from outside experts

## Specific Internal Plan

- Identify most likely breeding sites
  - Storm water management system
  - Moist decaying organic mater
- Treat these sites with pesticide
- Clean out likely breeding sites when possible

#### Pesticide Treatment

- Central Pest Control Toughkenamon, PA
- Focus on Storm Water Management System and other damp areas
- Offer individual treatment of homes

## Pesticide Treatment

(Cont'd)

- Natural pesticide
  - Bacillus thuringiensis var. israelensis
  - Safe for humans and pets
  - Targets adults and larvae
- Begin treatment in April
- Every month through June
- Assess treatment program

## Clean Up

- Areas in and around inlets to storm water management system
- Stand pipes in bio-basins
- If possible, replace mulch in bio-basins to prevent overflow into Storm Water Management System

## Ongoing

- Monitor community
  - Homeowner surveys
  - Monitor treated areas
- Encourage homeowners to audit areas around homes
- Continue to coordinate with the township

## Reality

- Phorid flies are endemic to the area
- We cannot expect to totally eliminate them
- Our goal is to manage and control them to tolerable levels
- We will continually audit our efforts and change, when and as needed
- We feel we have developed a workable and cost-effective plan based on the best information available