

## How Black Fly Populations in PA are Affected When Black Fly Control Activities Cease Mid-Season - Andy Kyle

- a) Background
  - i) Program started in 1985
  - ii) Aerial application of Bti for black fly control
  - iii) Largest black fly control program in the world
  - iv) Treat 46 rivers and streams (1600 miles)
- b) Procedure
  - i) Eggs hatch in April
  - ii) Control begins in April or May
  - iii) Control ends in early Sept
  - iv) 3 river basin area contracts
- c) Monitoring and surveillance
  - i) Larval surveillance ~900 sites
  - ii) Adult sampling ~1100 sites
  - iii) Samples taken back to lab and ID'ed
- d) What was new in 2009
  - i) State budget impasse
  - ii) No budget until Oct
  - iii) Black fly program appropriation was slated to be reduced
  - iv) Decision - stop treatments on July 21, 2009
  - v) Continued to do surveillance
- e) What happened in August - 2 weeks after control was stopped
  - i) Citizen complaints began to rise
  - ii) Black fly numbers rose to impossible levels
  - iii) Problems continued after the regular season was over
  - iv) Businesses were complaining of loss of business due to black flies
  - v) Legislative inquiries began - didn't seem to understand the connection between budget cuts and rising black fly populations
- f) What happened with the black fly populations
  - i) Larvae were seen in late Sept and early Oct, even after colder weather had begun
  - ii) Adult surveillance
    - (1)  $\leq 10$  are tolerable
    - (2) 0-1 are normal after control
    - (3) Considerably more adults were found in 2009 than in the 4 previous years - as many as 600 adults in a sweep net
- g) Implications for 2010
  - i) Budget hasn't increased
  - ii) Control will likely stop early again
  - iii) Black fly populations got a head start due to lack of later season control in 2009