

## The Use of a Customized Field Data Management System in Mosquito Control - Tim McGonegal

- a) Background
  - i) Prince William County
    - (1) Population base is 402,000
    - (2) Bedroom community for DC
  - ii) Control mosquitoes and various forest pests
    - (1) Full IPM
    - (2) 12 full-time, 5 seasonal
    - (3) Funded by tax levy (\$1.7 million)
  - iii) Why a new system
    - (1) Old system
      - (a) Paper based
      - (b) Lots of missing data
      - (c) Lots of data entry
      - (d) Techs averaged 7 hours a week doing multiple data entry
    - (2) New system process
      - (a) Started with an off-the-shelf product
        - (i) It was better
        - (ii) Still not a good fit
      - (b) Bid project out to The Timmons Group
      - (c) Neither side knew much about the other side's job
      - (d) Development
      - (e) Beta testing
- b) Benefits
  - i) Staff can spend more time doing their jobs
  - ii) Less error
  - iii) Reporting easier
  - iv) Can generate maps and reports for the public and for supervisors
- c) The system
  - i) Cost - \$24,000 total
    - (1) Software
    - (2) Security
    - (3) iPads
  - ii) Pests
    - (1) Mosquitoes
    - (2) Cankerworm
    - (3) Gypsy moth
  - iii) The field part
    - (1) Dashboard
      - (a) Lists appointments
      - (b) Has saved forms
      - (c) Lists site visits
    - (2) Map interface
      - (a) Treatment areas are mapped

- (b) Site treatment info available
      - (c) Site history available
    - (3) Tools
      - (a) Measure
      - (b) Tracking
    - (4) Data gathering form
      - (a) Drop down menus
      - (b) Time stamp
      - (c) Required fields
      - (d) Data go to the cloud as soon as you hit submit
      - (e) Goes into a data fusion table
    - (5) Search feature
    - (6) Working on some updates for calculating amount of product needed
  - iv) Lab part
    - (1) Adult ID mosquito form
    - (2) Mosquito larval ID form
    - (3) Testing info
  - v) Report generation
    - (1) Executive report
      - (a) By date range
      - (b) By tech
    - (2) Can generate a variety of reports using different parameters
  - vi) Can dump data into excel files
  - vii) Can use fusion tables
- d) Updates
- i) Currently web-based
  - ii) Will be converted to an app
  - iii) Look will change, functionality will improve