

Integrating Arc-GIS in a Spring Woodland Control Program – Paul Zaribecki (DE FW)

- a) High human density in close proximity to larval habitat
- b) Woodland control strategy
 - i) Main species needing control – *Oc canadensis*
 - ii) IPM approach
 - iii) Larval treatment by backpack and aerial control
 - iv) Treat 6,000-8,000 acres (high year 13,000 acres) a year on average
- c) GIS component
 - i) Old way – AgNav units recorded flight data only
 - ii) New way
 - (1) Created spray blocks in Arc GIS
 - (a) 310 blocks
 - (b) 2 counties broken into 5 spray blocks
 - (c) Zones and subzones
 - (d) Used population density data
 - (2) Utilized historic flight/spray data
 - (3) Wetland layers (SWMP)
 - (4) Aerial photos
 - (5) Institutional knowledge
 - (6) Ground proofed
 - iii) Spray block maps can be displayed on AgNav unit
- d) Benefits
 - i) Increased efficiency
 - ii) Increased accountability
 - iii) Better coordination/less confusion
 - iv) Less fatigue
 - v) Decreased reliance on institutional knowledge
- e) 4 years of data
- f) Other uses
 - i) Plotted adult fog requests on top of larvicide spray data
 - (1) Look for clusters
 - (2) Identify gaps in coverage
 - (3) Find new control sites
 - ii) Refine spray blocks
 - (1) Eliminate some areas
 - (2) Mark some areas as “always check”
- g) GIS is a useful tool