

## OMWM in Maryland: From Boom to Bust - David Schofield

- a) County programs
  - i) Largest is Dorchester County
    - (1) \$600-700 thousand budget
    - (2) Aerial capacity
    - (3) Thousand of acres sprayed
  - ii) Department of Ag office responsible for mosquito control
- b) OMWM
  - i) Practiced in
    - (1) Dorchester
    - (2) Somerset
    - (3) Worcester
  - ii) Beneficial to habitat
  - iii) Look at tidal marsh areas producing salt marsh mosquitoes
    - (1) OMWM opens up tidal flow and promotes biological control
      - (a) Ditch construction
      - (b) Pond construction to provide areas for fish to stay during tidal action
    - (2) Eliminate spoil areas
    - (3) Map vegetation before and after
    - (4) Mosquito surveillance
- c) Management techniques
  - i) Create ditches in depressions - open ditch system
  - ii) Pond construction -
    - (1) Closed ditch system
      - (a) Increase waterfowl carrying capacity
      - (b) Increased fish production
    - (2) Negatives
      - (a) Time consuming
      - (b) Can be issues in drought
  - iii) Fill breeding areas with spoil
  - iv) Water level control structures
- d) Budgetary crunch
  - i) 1976-early 1980s
    - (1) Good times
      - (a) Grants
      - (b) Good funding
      - (c) Public and private backing
      - (d) Money enough for personnel and equipment
    - (2) Opposition
      - (a) Lowering water tables
      - (b) Bringing in invasive plants
      - (c) Reducing waterfowl usage
    - (3) Outcome
      - (a) No management on wildlife management areas
      - (b) DNR didn't like open ditch system

- (c) Issues with possible endangered species
    - (i) Impact of OMWM on black rail is unknown
    - (ii) Sudden loss of cooperation from other agencies
    - (iii) Natural Heritage Program concerned about dragonflies
  - (4) Result - increased use of pesticides
- ii) Late 80s in 1990s
  - (1) Loss of cooperation
  - (2) Reduced work force
  - (3) Older equipment
  - (4) Delays in permitting process
  - (5) Issued permits very restrictive
  - (6) More use of pesticides
  - (7) Shift to more temporary programs
- iii) Today - only allowed to do maintenance work
- e) Effectiveness of OMWM
  - i) Reduction of mosquito breeding by 90%
  - ii) Reduction of adult biting
  - iii) Reduction in pesticide use
  - iv) Promote better habitat for marsh flora and fauna
- f) Not sure why OMWM has lost desirability as a control measure