

**USFWS' National Mosquito Management Policy for National Wildlife Refuges (NWRs) – Dr. Bill Meredith (DE Division of Fish & Wildlife)**

- a) Will set policy for mosquito control on National Refuges
- b) History
  - i) 1997 – NWR System Improvement Act
    - (1) Natural resource protection
    - (2) Mosquito control contents flawed
    - (3) Many errors of omission
    - (4) Focus too narrow – declared human health emergency
    - (5) Subsequent policies issued
  - ii) National Handbook for Mosquito Control Practices on NWRs
    - (1) 1997-2002: meetings to put together handbook
    - (2) National Mosquito Control Coordinator – Dr Michael Higgins
    - (3) No progress made
  - iii) Draft National Mosquito Management Policy
    - (1) May 2002 – Handbook put on “hold”
    - (2) 2002-2007: collection of information primarily within USFWS
    - (3) Oct 15, 2007 – draft policy published
      - (a) Deadline for comment – Feb 19, 2008
      - (b) ~150 sets of comments received
      - (c) ~30 from mosquito control
- c) Why is a policy needed?
  - i) Control on NWRs currently very variable
  - ii) Legal issues
  - iii) USFWS wanted some guiding principles before putting together a control handbook
  - iv) USFWS wanted more consistency and predictability
- d) Why does this need to be done right?
  - i) Policy could become the “gold standard” for control in “natural” or “wild” settings
  - ii) USFWS is a recognized and respected protection, conservation, and management agency
  - iii) This policy will dictate how mosquito control is done in about 50 Mosquito Control Districts (MCDs)
- e) Good Things (relatively)
  - i) Proposed policy seems to allow most existing control practices to continue
  - ii) Seems to allow mosquito control on NWRs where it has not previously been allowed
  - iii) Changes to language and/or clarifications/interpretations are needed
- f) Major Issues
  - i) Mosquito control is done for:
    - (1) Quality of life
    - (2) Economic impacts
    - (3) Public health issues
  - ii) Mosquito control districts actually do and pay for work done on refuge – critical partners
  - iii) Mosquito control is a necessary activity, not a refuge use
  - iv) USFWS needs to work with MCDs to prepare refuge-specific mosquito management plans (MMPs)
  - v) Status-quo control practices should continue until MMPs are in place
  - vi) MOSQUITO BITES CONSTITUTE A HUMAN HEALTH PROBLEM EVEN WHEN THERE IS NO PATHOGEN TRANSFER

- vii) MCD should have the final say – we are the experts, not the USFWS – for setting spray threshold criteria (USFWS has the final say for whether spraying occurs)
- viii) Spray threshold criteria need to be based solely on measures of mosquito abundance for species of concern, especially in enzootic areas – POPULATIONS ARE IMPORTANT, NOT POSITIVES
- ix) Pesticide choice need to be determined by:
  - (1) Efficacy
  - (2) Product cost
  - (3) Non-target impacts
- x) Type of control done needs to be based on practicality and need, not a universal hierarchy of source reduction, larviciding, and adulticiding.
- g) What's next?
  - i) USFWS will analyze input and prepare responses to be published in the Federal Registry along with the Final policy
  - ii) USFWS staff might meet with mosquito control personnel to discuss our input and their reaction
  - iii) AMCA is requesting a “stakeholder” meeting with the USFWS
- h) What do we hope to see?
  - i) Changes to policy language
  - ii) Clarifications/interpretations of some type via follow-up documents crafted with the help of the AMCA
- i) If it doesn't happen – AMCA may need to “go political”
- j) Hoping for a positive end result