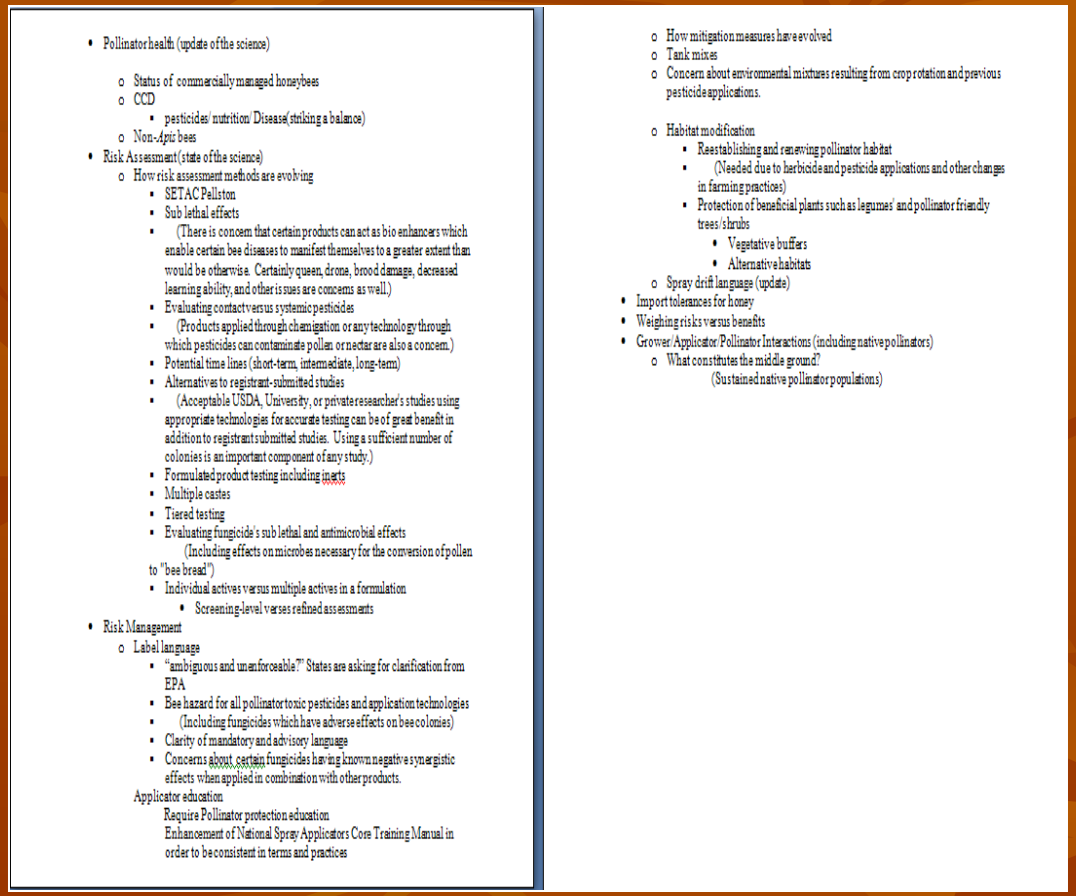
Pollinators

A

National Resource Priority Issue

Bee Industry Concerns

- Pollinator Health
- Risk Assessment Process
- Risk Management



- Pollinator health (update of the science)
  - Status of commercially managed honeybees
  - CCD
    - pesticides/ nutrition/ Disease(striking a balance)
  - Non-*Apis* bees
- Risk Assessment (state of the science)
  - How risk assessment methods are evolving
    - SETAC Pellston
    - Sub lethal effects
    - (There is concern that certain products can act as bio enhancers which enable certain bee diseases to manifest themselves to a greater extent than would be otherwise. Certainly queen, drone, brood damage, decreased learning ability, and other issues are concerns as well.)
    - Evaluating contact versus systemic pesticides
    - (Products applied through chemigation or any technology through which pesticides can contaminate pollen or nectar are also a concern.)
    - Potential time lines (short-term, intermediate, long-term)
    - Alternatives to registrant-submitted studies
    - (Acceptable USDA, University, or private researcher's studies using appropriate technologies for accurate testing can be of great benefit in addition to registrant submitted studies. Using a sufficient number of colonies is an important component of any study.)
    - Formulated product testing including inerts
    - Multiple castes
    - Tiered testing
    - Evaluating fungicide's sub lethal and antimicrobial effects
      (Including effects on microbes necessary for the conversion of pollen to "bee bread")
    - Individual actives versus multiple actives in a formulation
      - Screening-level verses refined assessments
- Risk Management
  - Label language
    - "ambiguous and unenforceable?" States are asking for clarification from EPA
    - Bee hazard for all pollinator toxic pesticides and application technologies
    - (Including fungicides which have adverse effects on bee colonies)
    - Clarity of mandatory and advisory language
    - Concerns about certain fungicides having known negative synergistic effects when applied in combination with other products.

  Applicator education

  Require Pollinator protection education

  Enhancement of National Spray Applicators Core Training Manual in order to be consistent in terms and practices

  - How mitigation measures have evolved
  - Tank mixes
  - Concern about environmental mixtures resulting from crop rotation and previous pesticide applications.
  - Habitat modification
    - Reestablishing and renewing pollinator habitat
    - (Needed due to herbicide and pesticide applications and other changes in farming practices)
    - Protection of beneficial plants such as legumes and pollinator friendly trees/shrubs
      - Vegetative buffers
      - Alternative habitats
  - Spray drift language (update)
- Import tolerances for honey
- Weighing risks versus benefits
- Grower/Applicator/Pollinator Interactions (including native pollinators)
  - What constitutes the middle ground?

    (Sustained native pollinator populations)

Risk Management

- Label Language
- Applicator Education
- Tank Mixing
- Soil Residuals
- Habitat Modification
- Spray Drift
- State Enforcement