Public Tick IPM Working Group

July 10th, 2019

Please send additions, omissions or other corrections to mweber@ipminstitute.org

The Working Group meets via conference call on the second Wednesday of each month at 1:00PM CT (2:00PM EST). The following notes are for July 10th, 2019

Roll

1. Amy Prunuske, University of Wisconsin
2. Bob Maurais, Mainely Ticks
3. Brittany Campbell, NPMA Pest World
4. Eric Hoffman, Armed Forces Pest Management Board
5. Gloria Kim, Limiting Lyme
6. Kathy Murray, Maine Department of Agriculture, Conservation, and Forestry
7. Kirby Stafford, Connecticut State Entomologist
8. Lynnae Jess, Michigan State University
9. Maria Weber, IPM Institute
10. Mason Kauffman, US BIOLOGIC
11. Scott Larson, Minneapolis/St. Paul Metropolitan Mosquito Control District
12. Tim Fox, Madison Area Lyme Disease Network
13. Tom Green, IPM Institute

Agenda

1. Updates and discussion on the Tick Academy
2. Updates, comments and announcements from the working group members

A recording of this call and presentation is available by visiting this link:
https://global.gotomeeting.com/play/recording/ebdec25d9919d9d19c055c0662ca3a337bae01a1151df34fb29af7be1fc71f09

Updated Tick Academy Agenda Overview

- Potential conflicts
  - November 6th to 8th or November 7th to 8th introduced as a window this fall to host the Tick academy
    - Need 20 to 25 interested attendees
    - Do not want to have to do a broad promotion of the academy
    - No objections to or conflicts with proposed dates
  - Possibility to defer until late May if we cannot run the academy in the fall
    - Potential Conflict: Northeast Regional Center for Excellence is running a mosquito bootcamp that covers ticks in May and may conflict slightly with speakers/attendees.
• Walkthrough of updated agenda
  o Introductory section: Focus on hands-on and practitioner audiences with a goal of attendees leaving the academy feeling more competent regarding diagnostics, sampling, and identification of ticks as well as feeling more informed and comfortable regarding available management options and communicating the science to their audience.
  o Day 1: Start out with introductions and agenda overview, then follow with main content.
    ▪ Focus: overview of tick biology, behavior, and vectored diseases; teach laboratory skills, taxonomy, and identification; prepare for field visit on day 2
  o Day 2: Start out with a recap of day 1 and a Q&A session
    ▪ Focus: Field visit and communicating the science around tick management; looking towards the future; exam and wrap-up
    ▪ Allow flexibility to swap day 2 agenda items with day 1 if weather is unsatisfactory for field visit
  o No objections or suggestions for improvement presented

Updates, Comments and Announcements from the Working Group Members
• Asian longhorned tick: Thoughts on adding Pest Alert to increase the amount of available literature? The Working Group developed a Pest Alert on Ticks and Tick-Borne Diseases three years ago, https://www.ncipmc.org/projects/pest-alerts/ticks-and-tick-borne-diseases/, there are also Pest Alerts for brown dog tick and Rocky Mountain spotted fever, https://www.ncipmc.org/projects/pest-alerts/
  o New research: Asian longhorned tick found in new regions and on new hosts in extraordinarily large numbers.
  o A pest alert would be useful but their emergence in the United States is a dynamic situation, therefore the pest alert would need to be kept general as more localities where it is present are discovered.
    ▪ Longhorned ticks do not seem to have strong preference for humans but will feed on them.
      • Primarily a livestock pest
      • Abundant on whitetail deer, goats, dog, sheep
      • Primarily looking to be a veterinary issue versus a human health risk issue
    ▪ Researchers to contact
      • Rutgers University
      • New Zealand researchers: where longhorned ticks were first detected
      • USDA Veterinary Services
  o Laura Iles and Lynnae Jess, co-directors of the North Central IPM Center will work with the group to develop the Pest Alert.

• Two years ago, Tick Working Group created document that outlines tick control options, primarily focused on chemical controls but also including information on repellents, habitat modification, tick checks, https://tickipmwg.files.wordpress.com/2018/10/tick-management-options-092018.pdf.
  o Outlines how to achieve maximum efficacy from applications
- There is a general lack of information regarding details of basic tick control including what an integrated approach looks like given the shortcomings of available control strategies in terms of complimenting them with other measures.
- Tick control services: Many pest control companies and landscape service companies are new to tick control. Current document could be supplemented with additional details, e.g. not making applications when ground/leaf litter is wet due to dilution potential. Conversely, control with mist blower was effective with pyrethroids.
- People want to use low toxicity products; those products are not always as effective, specific strategies need to be employed to maximize effectiveness, e.g., using a high pressure sprayer and turning leaf litter to maximize exposure given no or low residual activity.
- Group does not feel an update of the Tick Control Options document is needed at this time.

  - Control options
    - Burning: One of the most effective ways of controlling ticks is to take away their habitat by burning
      - Landscapers looking to join the tick control services business may already have burning equipment.
      - Concerns:
        - Issues with burning in residential areas
        - Tick populations usually recover within 1 to 2 seasons after burns
          - To continuously suppress the pest, you would need to do cyclical burns
      - Tick Control Options document, other resources are heavily geared toward blacklegged ticks versus the increasing lone star tick population.
        - Phenology for lone star ticks is quite different than for blacklegged ticks.
          - Control options targeting rodent hosts will not affect lone star ticks since they primarily feed on larger animals.
          - Changes to how often or when we apply to target lone star tick season
        - Pyrethroids very effective, don’t need to use much product for efficacy.
          - Control only lasts for a couple of weeks, ticks hiding under duff layer that come up later do not encounter residues.
        - NootkaShield™
          - Season-long control achieved but at 600 PSI.
          - Cost of production from cedar was prohibitively high, have developed a fermentation process.
        - US Biologic
          - New vaccine product awaiting licensing, commercialization plans next year

These notes are for a Working Group call on July 10th, 2019. Future calls will continue to fall on the second Wednesday of each month at 1 PM Central time.

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