



484TH MEETING

Minutes of the

Connecticut Entomological Society

21 January, 2011

Connecticut Agricultural Experiment Station, Windsor
Pre-meeting pizza and beverages were enjoyed by the attendees, 6:30-7:25 p.m.

Business Meeting

Meeting was called to order by President Richard Cowles at 7:30 p.m.; 6 members and 4 guests were present.

Reports: The minutes of the 483rd meeting were read by Secretary Munstermann. Treasurer Montgomery reported 3 additional memberships and CD interest produced an income of \$49, with expenses of \$75. The reports were approved as read.

Old Business: Member Krinsky felt that the discussion on pizza provision at meetings was not complete. Ensuing discussion produced the following points: (1) members occasionally arrive who have not pre-ordered, (2) at the November meeting inadequate pizza was available, (3) to answer the previous points, a trial figure of one pizza per 3 signees was suggested.

New Business: No new business.

Exhibits:

—William Krinsky presented two pinned adult bed bugs and 3 vials with eggs and several nymph stages in accordance with the theme of the evening talk by Dr. McKnight.

—Leonard Munstermann presented a drawer of the latest preparation cycle of Lepidoptera from the French Guiana expedition of October 2010 in which several CES members participated.

Evening Presentation: President Cowles introduced Susan McKnight, currently employed at Biosensory in Willimantic CT. She has had 30 years of experience with blood sucking pests in a variety of capacities at University of Arkansas, Auburn University, and the University of Florida. Her talk was titled *Bed bug, Insect du Jour*.

Ms. McKnight's first experiences with bed bugs was as a graduate student at the University of Arkansas where she noted the association of the bugs with hen houses, and where she maintained a colony by feeding them on her hand. Although bed bugs have a world wide distribution, few research publications were available before 2007 when bedbugs became a media event. Then 2008-10 alone, 44 new research pubs appeared.

Traditional methods of bed bug and flea control were effective and included washing of linen sheets (hot water kills them), cast iron bedsteads (claws without tarsal pads cannot scale smooth posts) and use of casters under bed posts with kerosene. Since the discovery of the insecticides DDT, malathion and diazinon, the traditional methods of bedbug avoidance have fallen into disuse. Subsequently, concordant events of insecticide resistance, air travel, and effective indoor ant control (Pharaoh ants are bedbug predators) have contributed to the bed resurgence.

Bedbugs transmit no diseases; therefore, public health departments do not claim them as an area of responsibility. Many people do not react to the bites, and especially those who are on immunosuppressant medications. Bedbugs can be detected by blood droppings (e.g., on sheets)

which dissolve in water and a distinctive almond odor. They feed quickly, 3-10 min required to repletion. Control for night time feeding is effective with intercept traps (manufactured by Biosensory) placed under bedposts.

Current best solutions:

- (1) Continuous monitoring: they are attracted by carbon dioxide (dry ice in traps).
- (2) Killed by heat: 120°F sufficient, e.g. hair dryer temps; “thermal remediation” control method of choice.
- (3) Scraping behind wall boards, vacuum cleaning.
- (4) Barriers: smooth bedposts, intercept traps, caulking and sealing of room crevices.
- (5) Chemical control: pyrethroids and nicotinamides remain effective; diatomaceous earth for bug desiccation.

Questions: A lengthy Q & A session ensued. One modern substitute for diatomaceous earth is Syloid, a silicate that is very light and very absorbent for insect cuticular waxes.

Literature made available:

- (1) List of recent bed bug research publications.
- (2) Description of ClimbUp® for bedbug monitoring; patent held by Ms. McKnight

Respectfully submitted,

Leonard E. Munstermann, CES secretary
15 February, 2011