



Beekeepers Guild of the Eastern Shore



The Shore Swarm

Newsletter

December 2017

BGES Leadership

George Brown --president. Ann Snyder-vice-president. Carol Zuccarino -secretary
Phil Harris -treasurer Tara Southard- Outreach Coordinator Estelle Spachmann- Newsletter Editor



A Message from our President

Greetings Fellow Beekeepers!

I'm happy to report our first meeting on Chincoteague Island was a success. Thanks to our "locals" Michelle, Uli, and Bettina for helping to pull this off. We had a lively discussion, barely leaving enough time for our featured speaker, W. T. Wilkins.

This time of year always catches me off guard because I am accustomed to winterizing my bees before the end of October, which is what I had to do when living in the snow belt. Here, I still walk around in shorts for Thanksgiving and my bees are still typically flying. I leave town for two weeks or more right after Thanksgiving to hunt whitetail deer back in northwestern

Shop <http://www.springer.com/us/book/9783319606354> for 29.99. Google Play has it for \$ 31.99. Barnes and Noble for \$ 57.99. Congratulations, Russell!

Book Review

Beekeeping-From Science to Practice is a thoughtfully compiled well-organized collection of research conducted by a variety of beekeeping specialists with carefully documented extensive bibliographies. References listed with each chapter provide the reader an opportunity to seek further information and explanation. The title *Beekeeping-From Science to Practice* provides a concise thesis statement of this collection of research conducted by active scientists currently studying honeybees worldwide.

The editors are Dr. Russell Vreeland and Dr. Diana Sammataro. Dr. Vreeland is a microbiologist who became involved with pollinator bees in the 1990s. Dr. Vreeland lives on the Eastern Shore of Virginia where he maintains honeybees and acts as a mentor to fellow beekeepers. He is a frequent speaker at civic organizations and schools. He also directs a small business involved in the use of salt-loving microbes to treat highly saline wastewaters from industries all over the world.

Co-editor Diana Sammataro has been involved with bees since the 1970s. Her extensive range of studies and experience includes a stint with the Peace Corps in the Philippines where she taught beekeeping, work at the USDA Bee Lab, Penn State Bee Lab, the Honeybee Lab at Ohio State University Agricultural Center, and at the Honeybee Research Center in Tuscon where she worked as a Research Entomologist.

At first, I did not like the book. It seemed way too technical and overwhelming and not at all practical for me. But I persevered and I forced myself to continue and eventually I grew to like it and wondered what will I learn about bees today. I am so glad I did. I learned so much and it broadened my background knowledge and understanding-such a very different approach from the comparatively simple books and web articles about bees and beekeeping which I usually read. I really liked the layout with the summaries and abstracts. It was somewhat refreshing and intellectually stimulating to have such an approach-even though I did not relate to some of the scientific details.

I would encourage bee clubs to buy the book to have as a reference as well as anyone who wants to have handy an intelligent guide-the complete antithesis of Beekeeping for Dummies.

The very beginning of the book presents concise summaries of the chapters. Abstracts at the beginning of chapters offer a helpful guide. Some of the chapters maintain an academic stance with scientific findings too technical and overwhelming for a backyard beekeeper. However, reading this book-even with its technically detailed sections and analytical studies - has broadened my understanding, knowledge, and appreciation of the complicated fragile life of the hive organism and the individual honeybee. The technical detailed studies are interspersed with practical advice/applications and interesting ideas-like that of the importance of propolis and the location of apiaries close to resin producing plants.

The chapter on pesticides stresses the importance of continual risk-assessment and reevaluation. In examining pesticide ingredients be aware that inactive ingredients are not necessarily inactive in areas other than the targeted population and that inactive ingredients are unregulated. Pesticide use also contaminates water supplies. Paraquat, generally used as an herbicide, is toxic to newly emerged honey bee workers thus acting as an insecticide. The use of pesticides compromises every stage of bee development and every level of hive production namely-wax, propolis, and honey. Overall, this book presents strong evidence of the deleterious effects of pesticides whose use may not directly kill honeybees but exposure can increase susceptibility to other stressors. Honeybee queens from hives used in almond groves have limited success due to the sublethal levels of pesticides and fungicides in almond pollen and have been found to emerge with Deformed Wing Virus. Colony losses attributed to viruses, other pathogens, or parasites, may actually be due to downstream effects of pesticides. Pesticides are everywhere and their use seems unavoidable.

Fungi includes yeasts and molds and are a vital part of a bee colony functioning in that the fermentation action of fungi converts stored pollen into bee bread. The chapter on Fungi highlights the importance of beneficial

fungi within the beehive organism drawing parallels to the human body needing beneficial fungi to thrive. Fungicides can cause the decline of the beneficial fungi within a bee colony and leave the colony weakened and susceptible to wax moths and chalk brood, and studies indicate a link between use of fungicides and CCD. Migratory beekeeping operations expose their bees to fungicides and pesticides in a variety of locations and a variety of products.

The chapter on cell culture though very technical and not practical for an ordinary beekeeper presents useful interesting background information which helps with the understanding and appreciation of the life of these fascinating complex creatures. Cellular level research is not within reach of most beekeepers but findings present ideas that are challenging and ever-changing in the dynamic field of beekeeping. Honey bee cell cultures systems, such as the AmE-711, are a means of “working small to solve big”.

The chapter on viruses focuses on those that cause paralysis, those caused by varroa mites, and those that cause deformed wings. Viruses may be present in covert asymptomatic infections and not be obvious until it is too late. Varroa is an ectoparasite and transmits viruses. Some viruses are associated with aggressive bees. Viruses can also emerge due to the stress of overcrowding prior to swarming. The mechanical break of bees’ body hairs provide access to bee hemolymph. The use of nets in pollination can also lead to mechanical stress. The Epidemiology chapter proves difficult to follow even with its illustrations, charts, figures, boxes, and labeling.

Experienced beekeepers have first-hand knowledge of small hive beetles. Detailed photographs support the small hive beetle information.

Foulbrood diseases caused by bacteria affects brood and can kill entire colonies. Laboratory studies of American Foul Brood and efforts to understand this disease are reported as well as its history.

Chemical communication is about pheromones. Pheromonal compounds regulate every aspect of life in the hive. Focus is on brood pheromones and worker inhibitor pheromones on molecular and physiological levels. Through pheromones, larvae manipulate workers to meet their needs not unlike like infants training parents to respond to their needs. There is background information on experiments and research centered on using the bee pheromones to control varroa mites.

The idea of Natural Honeybee selection for resistance to mites is presented in the following chapter. Extensive studies and experimentation have been underway in France, Norway, the Netherlands, and the US.

Honeybee venom systemic allergic reaction (SAR) and large local reaction(LLR) present risks to beekeepers and their families. Clinical tables present a wealth of information from practical to technical to scientific. This final chapter describes stinging insects of the order hymenoptera and reactions, risk factors, prevention, and treatment of stings.

Beekeeping-from Science to Practice is a volume for experienced knowledgeable beekeepers who are seeking to broaden their horizons into fields of research as well as practical everyday applications with their bees.

Reviewed by Estelle Spachmann

Telling the Bees
Evan Clements

Marriage, birth, or burying,
News across the seas,
All your sad or merrying,
You must tell the bees
Old Folk Saying and Custom

The Beekeepers Guild of the Eastern Shore lost a good friend and an

honored member on September 21, 2017, with the death of Evan Clements of Onancock.

Evan was not a member likely to be seen among bee hives. His wife Mary was the beekeeper in the family, and she is well known for her candle-making classes and many other interests – bee related and otherwise. While poor health kept Evan close to home, nevertheless, he was still able to offer essential help to the Guild as our first webmaster. Anyone who visits our website today will still find the thoughtful introduction, photographs, links and articles that Evan pulled together. He created a marvelous resource for the public and for our members.

Evan was a computer guru and not only kept the website lively and current but also provided patient and generous guidance to the computer illiterate among us. This may have been a small part of Evan's very full life, but it made an enormous difference to our guild in its early days. It was always a pleasure to work with him.

Evan led a productive life as a nurse in many capacities, most recently in the Corporate offices of Rural Health. He enjoyed many other interests as well: photography, woodworking, computers, dogs, and writing. Our deep condolences go to Evan's wife Mary. We are thankful for his life, and we will miss him.

Looking forward to spring...



Upcoming Meetings:

December - No meeting

Saturday, January 6th, 2018 Ag Station (Painter) at 10 am. Queen rearing.

Tuesday, February 6th, 2018 Barrier Islands Center at 6:30 pm. Raising Nucs, guest speaker Dave Kvello.

March 10th and 17th, 2018 will be our **Beginning Beekeepers Class** at the Ag Station in Painter. Volunteers are needed to help put this together. Contact me or any other officer if you would like to assist. This is a wonderful event that has allowed us to educate many on the importance of the honey bee and to evangelize beekeeping in general.

Tuesday, April 3rd, 2018 Barrier Islands Center at 6:30 pm. We will review the three methods of making splits (OTS, Walk-away, and Nucs) that were discussed in prior meetings because this is the time of year, depending upon the weather, to begin implementing the split methods before natural swarming occurs. This presentation will review the methods but focus more on the steps required to actually get out and do it!

Saturday, May 5th, 2018 Ag Station at 10 am. Control and removal of unwanted bees. This will focus on yellow jackets, hornets, and other types of bees and wasps not including honey bees.



Membership DUES:

BGES dues \$20 State dues \$10 Membership runs from June 30-July 1. Application is on BGES website. IF you have not yet paid your dues for this year, please mail your check to our treasurer Phil Harris at 20496 Seaside Road Cape Charles, VA 23310

The BGES has a Facebook page. Log on to see some of the latest escapades of fellow BGES.

The official website for the BGES is <http://www.bgesva.org/index.html>

Any news worthy items-feel free to forward to emspachmann@gmail.com for possible inclusion in future newsletters.

