

THE WAGNER FREE INSTITUTE OF SCIENCE

Fall 2019

ZOOLOGY SERIES

Springing and Singing: Grasshoppers, Crickets and Katydid – Oh My!

Professor Greg Cowper

This course will be held at the **Parkway Central Library, Free Library of Philadelphia**, 1901 Vine Street (between 19th and 20th streets, on the Parkway), Philadelphia. The class meets in the Science and Wellness department, room 202.

Dates: 6 Tuesdays from September 17 – October 22, 2019

Time: Classes meet from 6:30 to 8 PM

This course requires pre-registration. To sign up, click on the link on the Wagner's course schedule webpage or call 215-763-6529 x23.

Course Description

This new course introduces Entomology, the study of insects, through an in-depth examination of the insect order Orthoptera, the grasshoppers, crickets and katydids. Students will learn about the evolution, classification, morphology, and behavior of this important group of insects. Species diversity and native Pennsylvania examples of the three groups will be highlighted.

Course Schedule

- 1. Tuesday, September 17, 2019 – Introduction to Orthoptera**
Evolution, metamorphosis, morphology, classification, sound production and a first look at Grasshoppers.
- 2. Tuesday, September 24, 2019 – Discussion of Grasshoppers continues**
Locust swarms, entomophagy, species diversity and sound production.
- 3. Tuesday, October 1, 2019 – A first look at Crickets**
Morphology, classification, and sound production.
- 4. Tuesday, October 8, 2019 – Discussion of Crickets continues**
Adventive species, cricket flour, and species diversity.
- 5. Tuesday, October 15, 2019 – A first look at Katydid**
Morphology, classification, and sound production.
- 6. Tuesday, October 22, 2019 – Discussion of Katydid continues**
Night visitors, species diversity, and native species.

Suggested Readings

Capinera, John L., Ralph D. Scott and Thomas J. Walker. 2004. *Field Guide to Grasshoppers, Katydid, and Crickets of the United States*. Comstock Publishing Associates, 249 pps.

Dethier, Vincent G. 1992. *Crickets and Katydid, Concerts and Solos*. Harvard University Press, 140 pps.

Eaton, Eric R. and Ken Kaufman. 2007. *Kaufman Field Guide to North American Insects*. Houghton Mifflin Co., 391 pps.

About the Professor

Greg Cowper Greg Cowper is an Entomologist at the Academy of Natural Sciences of Drexel University where he has just completed a three-year National Science Foundation funded project *OrthopNet: Connecting Grasshoppers to Field Notes*. He continues to study the evolution and speciation of the flightless grasshopper genus *Eremidium* endemic to the forest patches and sky islands of South Africa and is preparing grasshopper specimens collected in South Africa from a 2007 expedition. Other interests include Urban Entomology and he and an Academy colleague have organized an Urban Insect Biodiversity Symposium at the November Annual Meeting of the Entomological Society of America. He has been a member of the Wagner's faculty since 2014.

The course is presented by the Wagner Free Institute of Science. Founded in 1855, the Wagner is dedicated to providing free science education. All classes are free and open to the public. To attend, please complete a registration/enrollment form at the class. For more information about the Wagner Free Institute of Science and its programs, please visit www.wagnerfreeinstitute.org or call 215-763-6529.
