

POSITION ANNOUNCEMENT
Department of Entomology
College of Agriculture and Life Sciences
Cornell University
Ithaca, NY

POSITION: Extension Associate

STARTING DATE: January 1, 2015

LOCATION: Dyce Laboratory for Honey Bee Studies
Cornell University
209 Freese Road, Ithaca, NY 14850

SUMMARY: Continuing severe die-offs of colonies of honey bees, our principal agricultural pollinators and honey producers, demand focused study to establish the nature and intensity of threats from pesticides, parasites and pathogens in NYS. This need is essential for the development of appropriate bee management practices to maximize honey bee health.

BASIC FUNCTION AND RESPONSIBILITY: The successful candidate will develop a program for monitoring the impacts of pesticides, parasites and pathogens on honeybees. Initial focus will be on the needs of NYS commercial beekeepers, who have suffered the most severe economic losses. In addition, the candidate will be expected to contribute to general education for commercial and smaller scale beekeepers, such as hobbyists.

PROGRAM JUSTIFICATION: Over the past several years, NYS-based commercial beekeepers have lost 70% of their bees to unknown causes. These losses occurred before colonies were moved to their winter quarters in southern states, suggesting that factors other than prolonged cold temperatures were responsible for the losses (e.g., exposure to pesticides, pathogens, parasites and other abiotic stressors). The economic impact of these losses are significant not only to beekeepers, but also for NYS's fruit and vegetable growers, and ultimately to NYS's food consumers.

DUTIES AND RESPONSIBILITIES: Address honey bee health and management issues in the context of related past and on-going research in New York State, the US, and abroad. Apply for additional funds to support applied research/extension efforts. The candidate will be expected to work closely with other pollination biology faculty in the department of Entomology and other groups in CALS.

Develop a monitoring program for evaluating the impacts of pesticides on commercial beekeeping operations. (20%)

- Develop a state-wide bee monitoring program (de novo or in collaboration with existing monitoring programs) for New York's commercial beekeepers

Gather data in order to identify the causes, timing, and severity of colony losses and estimate their impact on the State's agricultural economy. (40%)

- Measure the presence and potential effects of man-made chemical toxins of honey bees, in live adult bees, their brood, collected pollen, and in colonies that have died *en masse*.
- Examine weak and dying colonies for evidence of disease, esp. workers heavily infected with the deformed wing virus, which is transmitted by the ectoparasitic mite, *Varroa destructor*, and is the main source of colony mortality due to high mite loads.
- Review honey bee management practices in order to identify practices that may contribute to poor colony health and survival.

Network and build relationships with the Departments of Entomology, Natural Resources, Horticulture and Cooperative Extension. (15%)

- Present an annual report of findings to the NYS Department of Agriculture and Markets, the Chairpersons of the NYS Senate and Assembly, and the Department of Entomology, Cornell College of Agriculture and Life Sciences.
- Collaborate with Cornell faculty in the areas of pathogen detection and pesticide screening in order to develop novel methods for evaluating colony health
- Contribute to writing, and editing of manuscripts, reports and outreach materials.

Develop new outreach and extension materials for educating beekeepers about the potential impacts of pathogens, parasites, and pesticides on colony health (15%)

- Provide online extension materials to help improve bee management and colony health.
- Develop educational program to support commercial beekeepers, smaller-scale beekeepers, and hobbyists.
- Develop, disseminate and apply sound scientific, technical and related research knowledge in order to improve the resiliency of bee populations.
- Provide presentations to beekeeper stakeholders, as time and effort allow.

Apply for additional funds to support applied research and extension efforts. (10%)

- Identify and secure external funding through grant writing, foundation requests, corporate sponsorships, and other sources of support.

This is a two-year term position, renewable depending on funding, available work, and performance.

QUALIFICATIONS: MS degree in Entomology, Biology, or related field. At least 3-5 years of experience in beekeeping. Outstanding interpersonal and organizational skills. Excellent written and oral communication skills.

SALARY: commensurate with experience

SUPERVISION: Dr. Bryan Danforth and Dr. Thomas Seeley

APPLICATIONS: Applications should be sent by email to Cheryl Gombas (cag45@cornell.edu).

Please include a CV and cover letter sent by email in one PDF file. Review of applications will begin immediately and will continue until the position is filled.

SUPERVISION EXERCISED: none

Diversity and inclusion are a part of Cornell University's heritage. We're an employer and educator recognized for valuing AA/EEO, Protected Veterans, and individuals with Disabilities.