Swarm aggression between ant colonies

We seek volunteer student assistance for work on a project directed by Dr. Jennifer Fewell and Dr. Stephen Pratt in the School of Life Sciences, and Dr. Theodore Pavlic in the Fulton School of Engineering.

Project description.

Social insects operate without centralized command, using highly coordinated simple behaviors to perform complex tasks in large groups. One such complex behavior is colony defense. By analyzing decisions made during between-colony conflicts among harvester ants (*Pogonomyrmex californicus*), we hope to gain insight into non-centralized defense and offense organization. By studying complex interactions between large groups of ants in this way, we intend to generate individual-level behavioral models that not only help understand social insects but also provide templates for swarm-vs-swarm algorithms in unmanned robotics. **We are seeking student researchers to assist with the extraction of data from video recordings of aggressive behaviors, and to possibly assist with in-lab colony aggression manipulations of harvester ants.**

Students interested in this opportunity should **contact Dr. Kaitlin Baudier (**kbaudier@asu.edu**) by e-mail**. Each interested student should include in the e-mail:

- **An up-to-date resume**
- **A statement of why s/he is interested in this opportunity**

Work on this project may start as early as this summer. Interested students are encouraged to contact Dr. Baudier as soon as possible.