Weekly reports are to be emailed to atbecker@uh.edu by 5:00pm on Tuesdays. The purpose of a weekly report is to: (1) give you text and images for your papers, thesis, and dissertation, (2) document progress, (3) identify if you are stuck or need resources.

## Weekly report

# 1. My *Goals* from last week

- Research and find expandable aluminum mesh (measured to the right size)
- Test out the strike program for the net
- Test the GPS logger for the mosquito net
- Testing the system together

### 2. My Accomplishments this week

- a. Project 1: Mosquitos vs. Drones
  - deliverable 1. Expandable Aluminum Mesh
    - o It was hard to find the small sizes for this type of mesh, but placed an order through amazon for 3 different sizes
    - o Crafting Aluminum Mesh seemed to have been the closest material to the one used in the electric mosquito zapping racket in the lab
  - deliverable 2. Testing the Strike Count program
    - Tested it at home (not outside) with a screwdriver, and was able to get positive results

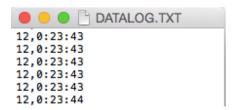


Figure 1 – Strike Count

- deliverable 3. *Initial GPS Test* 
  - o Taking the control box outside and making sure the GPS and the weather shield are collecting proper data
  - o GPS had an error at the end, but the beginning of the trace was correct



Figure 2 – GPS Testing

- deliverable 4. Testing the full system
  - O Took the system for a full test near a lake and was able to zap at least 20 bugs (weather has made it hard to be able to test the system multiple times)
  - O However the data came back blank... not sure what went wrong, but the GPS logger was picking up signal, and the initial set up test before connecting the net and walking around worked perfectly fine.
  - o The weather logger was also not logging properly

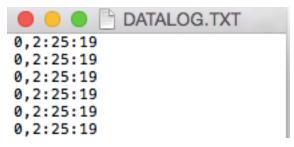


Figure 3 – Strike Count



Figure 4 – GPS Logger

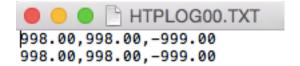


Figure 5 – Weather Logger

#### 3. My Goals for next week

- Troubleshoot the system again and figure out where the problem lies
- Once aluminum mesh arrives, create a prototype with 3 layers similar to that of the electric zapper racket
  - a. Meeting with Dr. Becker on June 8<sup>th</sup>, 2017 at 11 am (if available)

#### 4. What I need Dr. Becker to do:

- a. Need the amazon order reimbursement form signed
- b. Some study material on flying drones