

Entomological Approach for Industry

Emma Grace Crumbley
ecrumbley@mosquitosquad.co

MOSQUITO
SQUAD[®]



Emma Grace Crumbley

Entomologist & Science Communicator



ecrumbley@mosquitosquad.co
www.linkedin.com/in/emma-grace-crumbley

Emma the Entomologist



UGA CAES:

- Entomology (BSES, '21)
- Applied Biotechnology (BSAB, '21)

UGA Entomology Department:

- Founding Member & President of the UGA Entomology Club
- Head Zookeeper for the UGA Insect Zoo

Day Butterfly Center

- Lead Lepidopterist for USDA certified butterfly conservatory

Rollins Learning Center

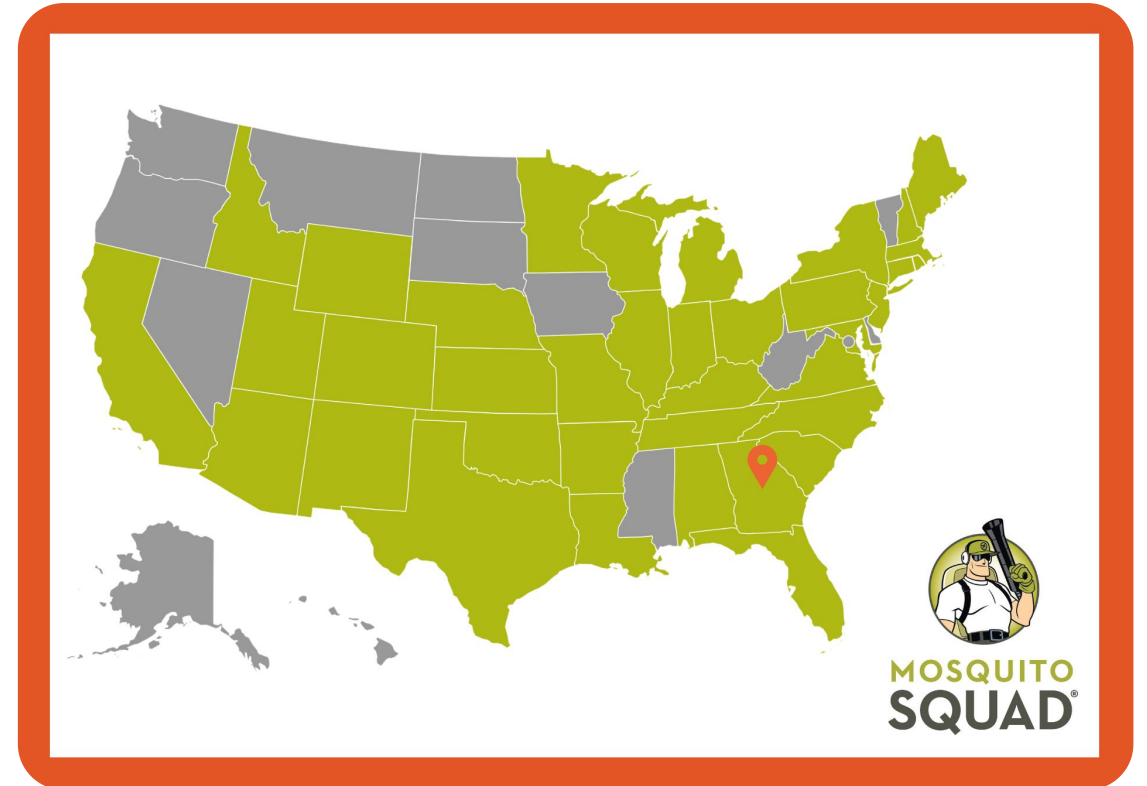
- Learning & Development for Orkin New Hire Training

Mosquito Squad

- Entomologist & Subject Matter Expert
- Content Creation & Media Communications

Mosquito Squad

- An Authority Brands company established in 2005.
- Headquartered in Macon, GA.
- Franchise-based pest control company with over 220 franchise locations across 37 states.
- Each franchise is locally owned and operated, and technicians live in the communities they treat in.
- Core services include mosquito and tick control,
- Four Pest Packages added in 2024 that include yard pests, occasional invaders, flies, and exterior structural pest control.



The Squad Approach to Mosquito Control

*Our mission is to be the premier outdoor pest control company in the industry by providing state of the art products and services through our best-in-class technicians and sales teams, while **advocating for environmentally safe processes and products.***

Environmental Commitment

Mosquito treatments are scheduled every 21 days following the label for optimal protection and mosquito management.

Technicians are trained to avoid plants in bloom.

14 Mosquito Squad locations have beekeepers on staff, and several members of the corporate team raise bees.

Continuing education on pollinators and beneficial insects is offered year round for owners and technicians.



The Squad Approach to Mosquito Control

Effective treatments require collaboration between our technicians and homeowners.

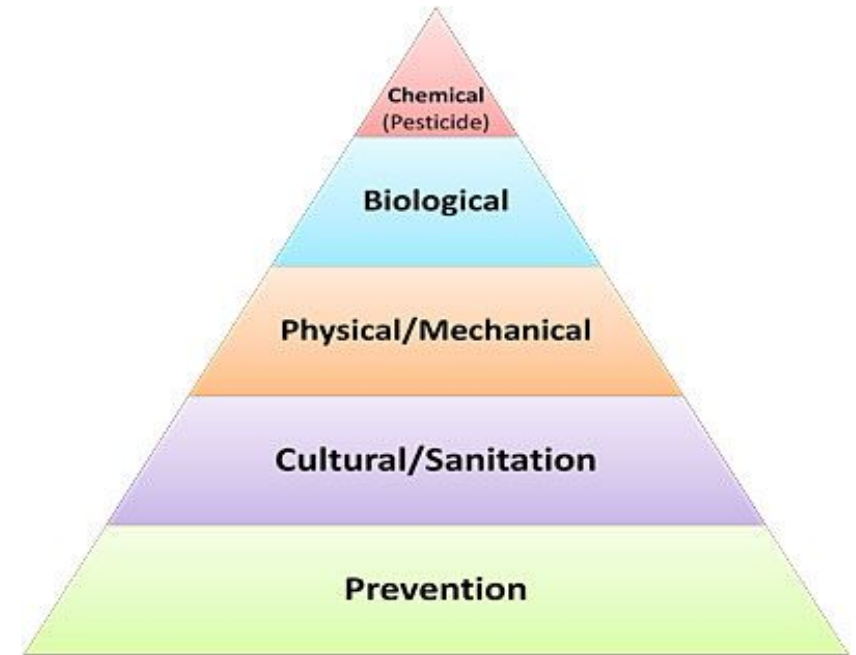
PRINCIPLES OF MANAGEMENT

5 Fundamentals: Inspection, Identification, Communication, Mechanical Control, and Chemical Control

Mosquito Squad technicians are highly trained to utilize an IPM approach for every service.

Before chemical treatments are performed, technicians inspect properties, identify areas of concern, communicate with customers, and reduce breeding grounds as much as possible.

Chemical treatments are the final step, and products are used only in accordance to their labels and federal regulations.



Inspection

Examining each customer's unique property layout and personalizing a control plan to match their pest needs and parameters.

Source Reduction:



Intentional Containers



Accidental Containers



Water Features or
Natural Bodies



Flooding & Pooling

Also inspect wood piles, leaf litter, tarps, backyard playgrounds, toys, gutters, recycling, garbage, grills, for mosquito breeding grounds and harborage areas.

Identification

Confirming the type of pest problem based on customer complaints, customer photos, and pest evidence.

Listening to Customers:

- Pest Problems
- Areas of Infestation
- Severity of the Issue

Identifying Pests:

- Recognize mosquito lookalikes
- Locate pest evidence (egg rafts, mosquito swarms, bug bites)
- Inspect for additional pest problems



Communication

Educating customers on their current pest problems, provide suggestions to prevent future pest problems.



Mosquito Squad Technicians confirm with customer specific pest problems, explain to homeowners the areas harboring mosquitoes around their property, and provide suggestions to prevent future issues.

Communication

Confirming treatment plan in regards to property layout and any areas of concern.

Sensitive Areas

- Plants in bloom
- Apiaries
- Vegetable Gardens



Other Concerns

- Pets
- Livestock
- Fish Ponds
- Neighboring Properties



Mechanical Control

Control methods taken without the use of pesticides or chemicals.



Technicians help reduce mosquito breeding grounds by:

- Tipping out water collected in accidental containers
- Turning over large items that could hold water
- Agitating still water in areas too large to remove and informing customer

Customers help reduce mosquito harborage areas by:

- Removing leaf litter, grass clippings, and woodpiles
- Trimming back overgrown foliage
- Cleaning out gutters and downspouts
- Performing regular lawn maintenance to avoid flooding

Chemical Control

Larvicidal Granules & Adulticidal Barrier Spray Applications

Larvicide is applied according to the label in areas where standing water is less accessible or difficult to remove, including:

- Drains
- Potted Plants
- Gutters & Downspouts
- Treeholes
- Ornamental Fountains
- Floodwater

Adulticide is applied according to the label in areas where mosquitoes rest and harbor, including:

- Trees (up to 15 - 25 feet, depending on surroundings)
- Bushes & Ornamental Shrubs
- Ivy & Kudzu
- Under decks and patios
- Brush, pine straw, mulch areas



Surveillance Tools

Customer Feedback

- Concerns, complaints, and upticks in specific services indicate regional pest pressures.
- Visiting locations every 21 days allows consistent monitoring of pests and effectiveness of treatments.

Google Alerts

- Tracking key terms in online publications for fast access to breaking news.
- Filter by source, publication type, and frequency of alerts.



A screenshot of a Google Alerts notification for the search term "west nile virus". The header is blue with the word "Alerts" and the subtext "Monitor the web for interesting new content". Below the header, the search term "west nile virus" is displayed with navigation arrows, and the date "October 15, 2024" is shown on the right. The main content area is titled "NEWS" and lists three news items: 1. "Infections, sewage and mosquito-borne illness outlast hurricanes - USA Today" with a small image of people. 2. "West Nile Virus Testing Market Forecast: Emerging Diagnostics - openPR.com". 3. "Four people infected with West Nile virus in New York City - MSN".

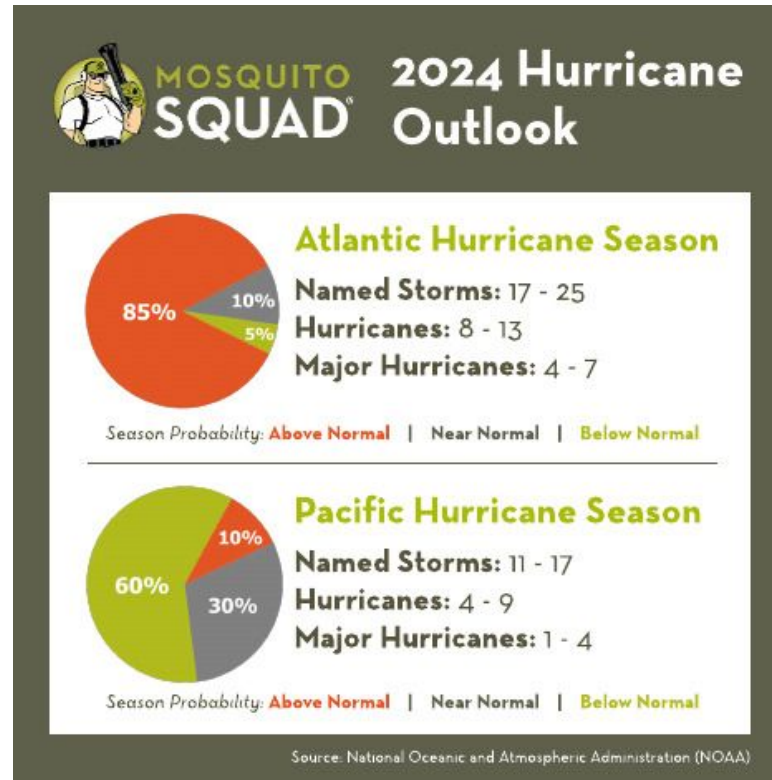
Surveillance Tools

National Oceanic and Atmospheric Administration



Predictive Pest Control

- Hurricane Seasonality
- Temperature Mapping across the US
- Precipitation Mapping across the US
- El Niño & La Niña Weather Patterns
- Future Climate Projections



Surveillance Tools

Centers for Disease Control and Prevention

Pest Control Communications

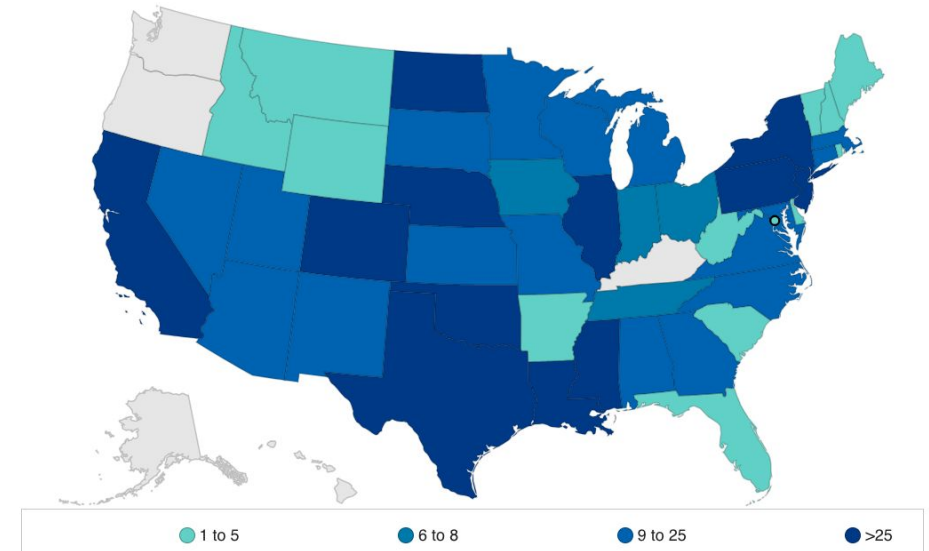
- Update owners on risks in their areas
- Create website content to inform customers

Mosquito Driven Illness Awareness

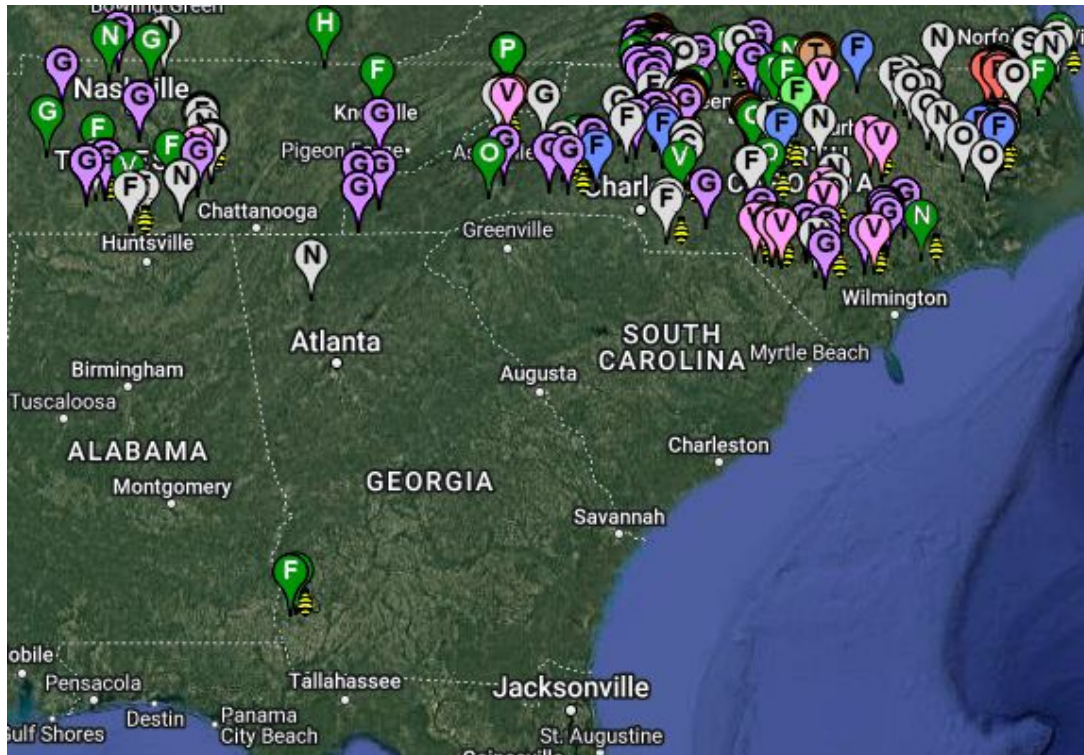
- West Nile Virus
- Dengue
- La Crosse Encephalitis
- Eastern Equine Encephalitis
- Zika



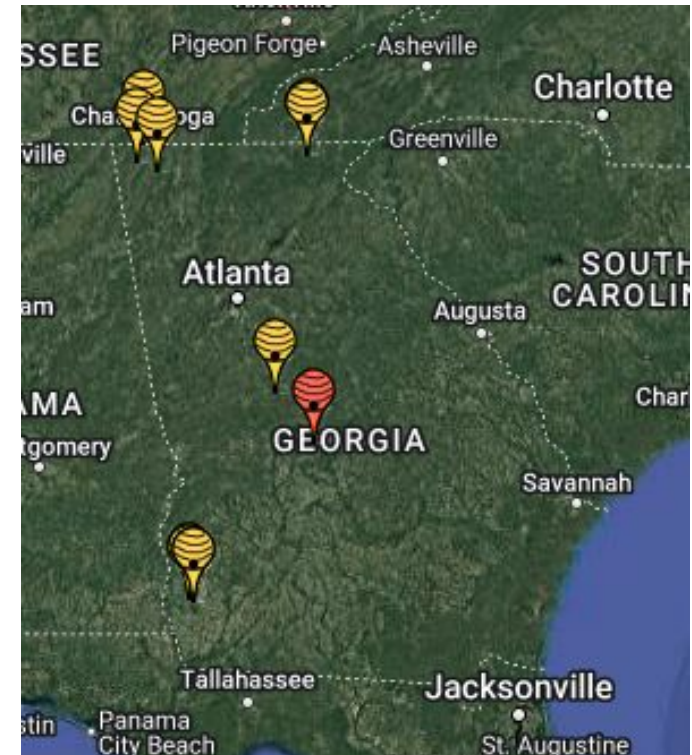
West Nile virus human disease cases reported by state of residence, 2024



Surveillance Tools



DriftWatch registry tool is meant to help pesticide applicators and specialty crop growers communicate more effectively to promote awareness and stewardship activities to help prevent and manage drift effects.



BeeCheck is meant to help pesticide applicators and beekeepers communicate more effectively to promote awareness and stewardship activities to help prevent and manage drift effects.

Entomological Engagement



Entomologist

- Provide scientific review of Mosquito Squad materials, including operating manuals and training materials.
- Lead training sessions for franchise owners and create supplementary training materials.

Science Communicator

- Content Creation including blogs, infographics, social posts, Q&As, and videos.
- Other communications include newsletters, fact sheets, marketing assets, and pest identifications.

Subject Matter Expert

- Connect with major media outlets to provide insights on current topics in the industry.

Entomological Engagement



WEST NILE VIRUS FACT SHEET

- West Nile Virus is spread to people through the bite of an infected mosquito.
- There are no human vaccines/medicines to prevent West Nile Virus.
- Protect yourself from mosquitoes by using insect repellents and wearing long-sleeved shirts and pants.
- Create a mosquito management plan to protect your home.

MOSQUITO SQUAD

SOURCE: CENTERS FOR DISEASE CONTROL AND PREVENTION

Entomological Engagement



**WHAT YOU NEED TO KNOW
ABOUT THE EEE VIRUS**

[READ POST](#) →



ARE NO-SEE-UMS MOSQUITOES?

[READ POST](#) →



**ENTOMOLOGY ADVOCACY WEEK
2023**

[READ POST](#) →

Entomological Engagement



Entomological Engagement

The Washington Post

How to get rid of mosquitoes without killing friendly pollinators

6 min 129



If other mosquito deterrents haven't worked, it may be time to call a pest-control company. But first weigh the benefits and risks. (iStock)

Don't waste time on gimmicks. Experts agree that most hyped-up "solutions," such as citronella candles or torches, mosquito coils, zappers and mosquito lamps, are largely ineffective, because they only emit an odor or electrocute mosquitoes in a small area. "Evaluate your lawn space, understand what attracts mosquitoes to your yard and control what you can," Crumbley says.



Does citronella actually ward off mosquitos?

Cheryl Fenton Reviewed

Published 2:10 p.m. ET June 15, 2022

HOMES & GARDENS YOUR GUIDE TO GOOD DESIGN

Kitchens

Experts share how to get rid of mosquitoes in the kitchen

Pest control professionals and entomologists have shared their best tactics for showing mosquitoes the door

martha stewart

How to Get Rid of Carpenter Ants, According to Entomologists

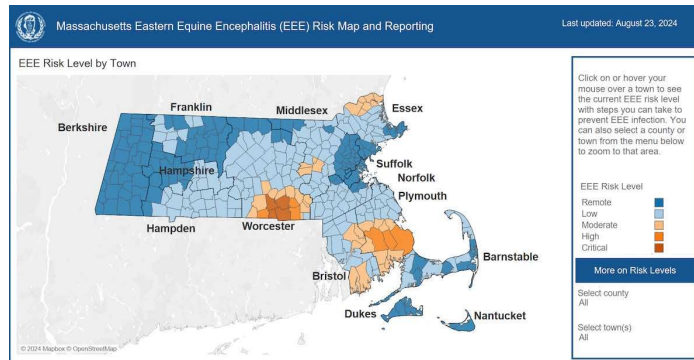
Carpenter ants chew through wood to construct their nests.



Entomological Engagement

In August 2024, EEE Virus cases were reported in the North Eastern United States.

In response, Mosquito Squad launched an awareness campaign to provide up-to-date and accurate information on symptoms and transmission of EEE.



A promotional poster for a Facebook Live event. The main text reads "LUNCH & LEARN" in large green letters, followed by "ON FACEBOOK LIVE" in smaller green letters. The event date and time are "SEPT 12 | 1 PM EST". The topic is "EASTERN EQUINE ENCEPHALITIS Q&A". The poster features a smartphone graphic on the right showing a hand holding a red pipette with "EEE" written on it. At the bottom left is a cartoon character of a mosquito, and at the bottom center is the Facebook Live logo. A small mosquito icon is also present near the date.

Entomological Approach for Industry

Training

- Entomology is an essential aspect of training for owners and technicians.
- Information on pest habitats and biology help technicians accurately identify pests and effectively treat for them.

Treatment

- An integrated approach to pest management is followed to maintain our mission of providing high quality service while advocating for environmentally safe processes and products.

Outreach

- Online engagement creates visibility for our company while promoting entomology and the industry as a whole.
- Providing our communities with entomological insights and resources helps establish us as leaders in the field and shows our customer base that pest management is a science.



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