Vector Borne Disease Prevention Program

Kevin Dick, District Health Officer June 27, 2023





Vector-Borne Diseases

- West Nile Virus, St. Louis Encephalitis, and Western Equine Encephalitis
- Rabies
- Hantavirus
- Plague
- Lyme Disease

Interventions

- Education
- Monitoring/Surveillance
- Prevention
- Treatment

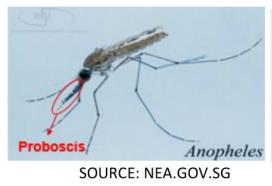




Are midges the same as mosquitos?

MOSQUITO

MIDGE



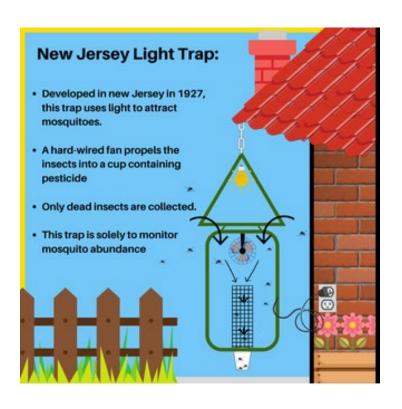


SOURCE: NUS

Unlike mosquitos, midges do not bite as they do not have probosces (piercing mouth parts). Midges do not spread diseases, but may cause discomfort and irritation to people who cross their flight paths.



Mosquito Surveillance – Trap Locations

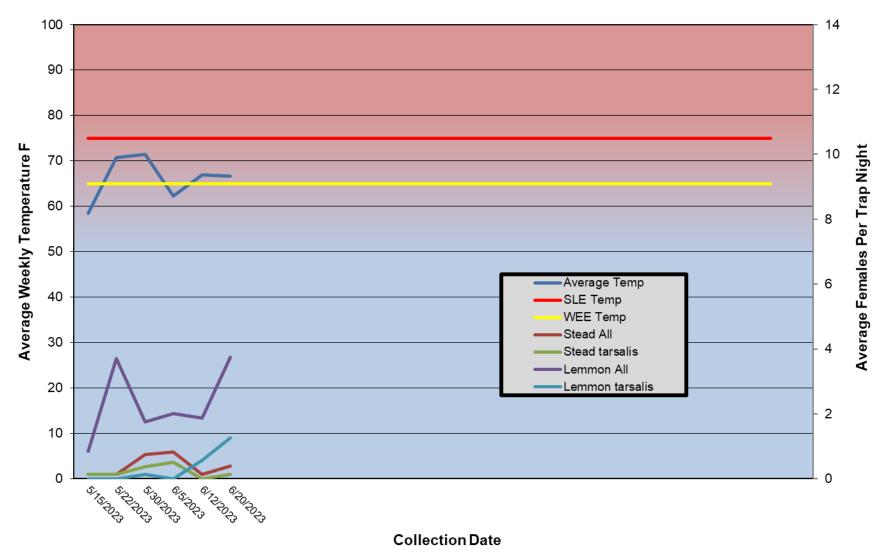


- Stead Airport
- Lemmon Valley
- Kiley Ranch
- Wingfield Springs (Red Hawk)
- Shadow Lane
- Rancho San Rafael
- Fire Station #37
- Rattlesnake
- Hanovarian Way
- Damonte Ranch
- Lakeshore
- Lewer's Creek





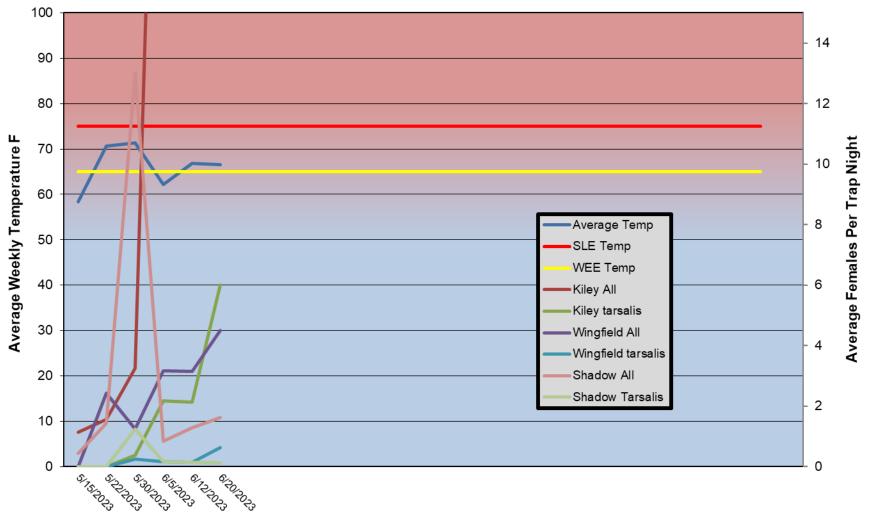
2022 Arbovirus Risk: Area 1







2022 Arbovirus Risk: Area 2

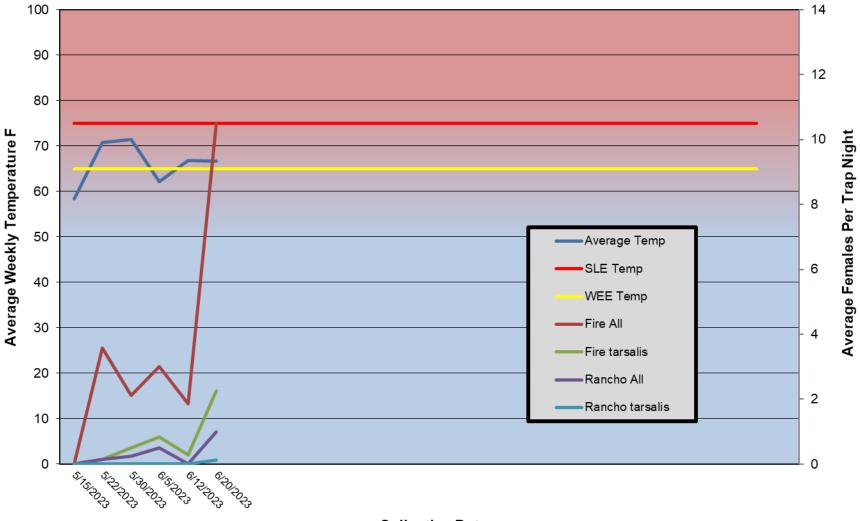


Collection Date





2022 Arbovirus Risk: Area 3

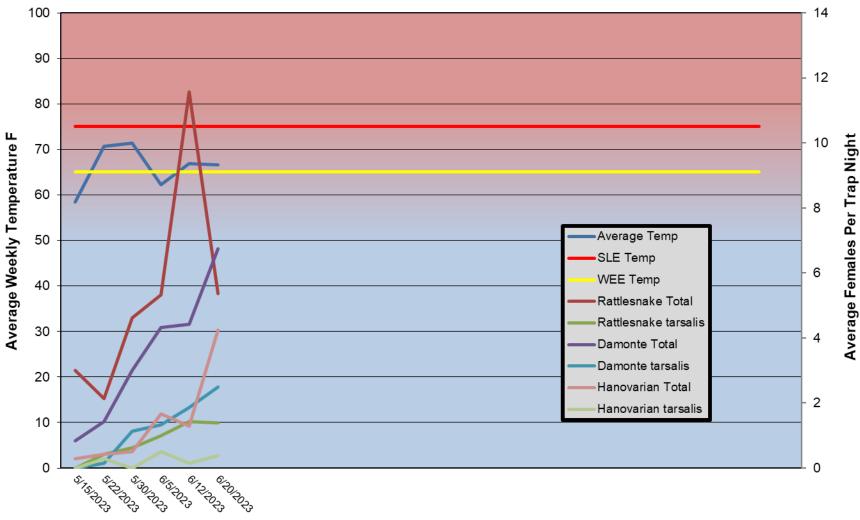








2022 Arbovirus Risk: Area 4A

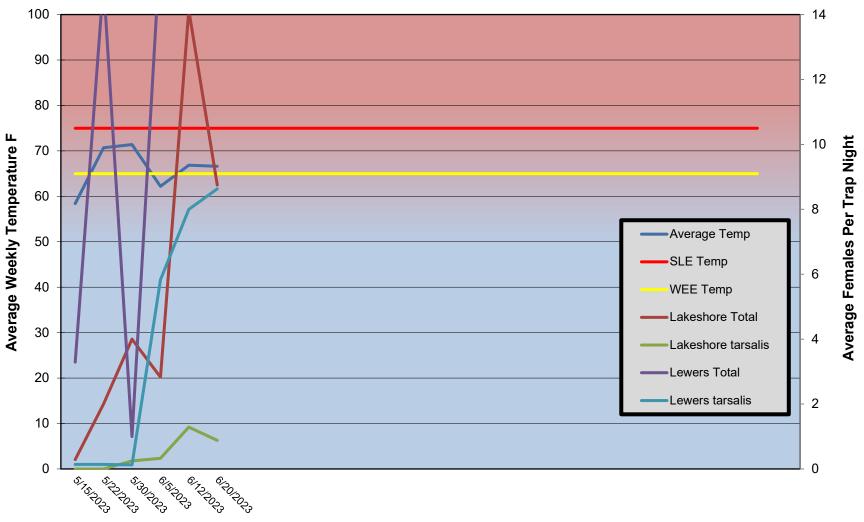


Collection Date





2022 Arbovirus Risk: Area 4B



Collection Date





Identifying Potential Health Risks



Mosquito Larvae Identified

Staff sampling one of over 25,000 catch basins







Integrated Vector Management Through Design



 Eliminates ponding water to reduce mosquito and midge habitat

 Reduces decaying vegetation and potential odors









Methods of Treatment

- Larvicide vs. Adulticide
- Catch basins and Hand treatment
- Helicopter
 - Pilot and company owner retired
 - New pilot still working on necessary licenses/insurance
- Drone
 - Awaiting FAA approval to fly
 - Additional treatment method





Personal Protection

- Avoid early morning and evening outdoor activities
- Use an approved over the counter insect repellent on clothing and exposed skin
- Wear loose-fitting clothing
- Avoid areas if mosquitoes are present
- Eliminate standing water where mosquitos can breed





