NEEDHAM

2023 REPORT OF THE NORFOLK COUNTY MOSQUITO CONTROL DISTRICT

NCMCD operations apply an Integrated Pest Management (IPM) approach to mosquito control that is rational, environmentally sensitive, and cost effective.

Surveillance

NCMCD is engaged in an intensive monitoring process through weekly field collections and data analysis in collaboration with the Massachusetts Department of Public Health (MDPH) to detect for disease-vectoring mosquitoes. Virus isolations assist us in focusing our surveillance to areas of concern thereby allowing us to alert nearby towns of a potential epidemic. Public requests for service alert us to high numbers of nuisance mosquitoes.

Virus Isolations in the town: 10 samples submitted, no isolations in 2023

Requests for service: 112

Water Management

The NCMCD reduces the potential for larval mosquito development through a variety of methods under this category. Our Freshwater Water Management Program includes Ditch & Pond Maintenance, as well as Culvert Area Clearing conducted to improve water quality and increase water flow.

Tire collection is a service in which we remove and recycle off rim tires in order to eliminate this source of potential larval mosquito development.

| Culverts cleared | 33 culverts |
|---------------------------------------|-------------|
| Drainage ditches checked/hand cleaned | 12,825 feet |
| Intensive hand clean/brushing* | 0 feet |
| Brushing for mechanical WM access | 0 feet |
| Mechanical water management | 0 feet |
| Tires collected | 2 |

^{*} Combination of brush cutting and clearing of severely degraded drainage systems or streams by hand.

Larval Control

When mosquito larval habitat management is not possible, larval mosquito abatement is the most environmentally friendly and effective method of mosquito control. An intensive monitoring program, aides in our decision to effectively target culprit locations.

| Spring aerial larvicide applications | (April) | 32.9 acres |
|--|-------------------------------|--------------|
| Summer aerial larvicide applications | (May – August) | 0 acres |
| Larval control - briquette & granular ap | plications by hand | 2.0 acres |
| Rain basin treatments – briquettes by ha | and (West Nile virus control) | 2,203 basins |

Abandoned/unopened pool or other manmade structures treated 0

Adult Control

Adult mosquito control is necessary when public health and/or quality of life is threatened either by disease agents, overwhelming populations, or both. Our surveillance program, along with service request data and state of the art GPS and computer equipment, allows us to focus our treatments to targeted areas.

| Adult aerosol ultra low volume (ULV) applications from trucks | 3,165 acres |
|---|-------------|
| Barrier applications on municipal property | 0 |

Respectfully submitted,