

OPERATIONAL AND SCIENTIFIC NOTES

SECTION MAPS AND SECTION CARDS AS AIDS TO GROUND CREWS IN A MOSQUITO CONTROL PROGRAM¹

W. C. JOHNSON AND J. P. THOMPSON

Metropolitan Mosquito Control District, Hennepin County Division, 1802 Como Avenue, St. Paul, Minnesota 55108

Aerial photo maps and section cards have proven to be valuable aids to seasonal ground crews employed by the Metropolitan Mosquito Control District. The maps and section cards are used in locating, identifying, and recording treatments of mosquito breeding sites. The aerial maps are also of value to pilots who refer to them to locate the breeding sites to be treated. Thus the possibility of treating the wrong site is minimized. The maps show at a glance the exact location of a breeding site in a mile square area and the accompanying section card lists all pertinent information needed to treat the site.

Aerial photos can be obtained from state and local agencies in various scales. The scale of 1 in.=660 ft converts well to a standard 8½ x 11 in. file system while at the same time shows sufficient detail. Copies are made of the original photos and the original is filed for reference.

The photo copies are then separated by county and township and numbered alphabetically. Each section is numbered 1-36 according to the 36 square miles in each township. When each section is identified by county, township and section number the breeding sites are located on the maps. Breeding sites are given a sequential number and color coded; *red* for sites that produce major pest (human-biting, *Aedes*) mosquitoes, *blue* for minor pest (occasional or non-human biting) mosquitoes, and *yellow* for normally dry sites or those which require special attention. All roads and landmarks are designated.

The section maps are updated annually to keep abreast of site changes and local development. Should a section require complete remapping a pantograph or shadow box is used to trace basic information from the original aerial photo and new information is drawn in.

To keep a record of site inspections and treatments M.M.C.D. devised an 8½ x 11 in. card that

fits behind the section map. The section card is identified by the same county, township, and section number as the respective map. In the far left column are listed the breeding site numbers which correspond to the site numbers on the section map. Site size in acres or tenths of acres is recorded in the 2nd column. The 3rd column lists site type; #1 denotes temporary floodwater, #2 woodland site, #3 permanent water, and #4 ditch site. These numbers are written in the same color code of the site as shown on the map. The 4th column keys special treatment needs, such as, a green P for pasture, or a yellow or red S for sensitive site.

The next group of columns is used for recording site inspections and treatments. Four groups of columns are each subdivided as follows. The first column is for the date of the inspection and/or treatment, followed by % of site that is wet. The 3rd column is a divided space for recording what was found: larvae, pupae, or adults, and the number found per dip for larvae and pupae or per 5-min period for adult collections. The employee who performs the inspection and/or treatment records his employee number in the next column. The 5th column is checked if the site is treated. The last 2 columns are used to record the results of larval samples submitted for laboratory identification. This information is recorded as a check mark in one of the two columns; red for *Aedes* or blue for non-*Aedes*. Species identities are recorded for each breeding site in the District computer system.

Inspection and treatment information is also recorded on a daily work report which indicates the equipment used to make the application, type of and the amount of insecticide used. These reports are turned in to the foreman at the end of the day.

The authors hope that other districts will find this method useful in their programs and would like to hear any suggestions or alternatives you may have.

AN INLAND MOSQUITO CONTROL PROGRAM

PATRICIA A. WRIGHT

Vector Control Team, Richland County Health Dept., 1221 Gregg St., Columbia, S. C. 29201

¹ Acknowledgments: We gratefully acknowledge the review and suggestions of Dr. R. Sjogren and Mmes. S. Brogren and V. Schandle in preparation of this paper.

Richland County, South Carolina, by nature of its topography, furnishes ideal conditions for