

pounds pressure. When not in use, this leaves all trucks free for carrying men or materials without having to dismantle tank and pump from the truck body.

## DREDGE OF FOUR-COUNTY COMMITTEE

By R. Vannote

The Four County dredge in the Upper Passaic Valley, which was visited on July 22nd by the Eastern Association of Mosquito Control Workers, has just completed its thirteenth month of operation. The dredge, which was designed by Robert L. Vannote, Secretary of the Four County Committee, has proven to be the most essential piece of equipment for the particular job.

The barge on which the dredge equipment is mounted was built in three sections because of the need for getting equipment through the bridges. (Twice during the last three months it was dismantled to pass under two highway bridges). The pump is a 10" Ellicott hydraulic pump, driven by a 150 H.P. Speedway engine. There are two auxiliary 32 H.P. LeRoi engines - one powers a five-drum hoist which operates the shore lines, cutter depth and two spuds, and the other engine rotates the cutter on the end of the cutter ladder. The cutter ladder is 20' long and capable of excavating to a depth of 12'. On each swing of the dredge a 12" cut is made, approximately 24" wide.

During the thirteen-month period from late June, 1940 to the end of July, 1941, 10,700 linear feet of river channel has been cleaned, excavating 103,419 cubic yards of material. One must realize, of course, that during this time the machine was not operating continually because of such hazards as ice, sub-zero weather, moving, dismantling for bridges, and minor breakdowns. Under normal conditions the dredge is capable of excavating 600 cubic yards of material in an 8-hour day.

At the present time the Passaic River Channel is being dug to a bottom width of 90' and a top width of 110', with an average cut of 36".

In the short time this dredge has worked a marked improvement has been noticed in the run-off from meadows in the Upper Passaic Valley. With evidence of improvement in this short time it seems reasonable that, as the work continues, the benefits will increase proportionately.

The Morris County Mosquito Extermination Commission, in New Jersey, is conducting experiments with large traps in an endeavor to develop one that can be used as a control measure.

The experimental trap now in use was designed after the N. J. State Mosquito Gauge, only 2-2/3 times larger, and has a 20" fan. The light attraction is under a study at present and preliminary work has shown a 200 watt bulb to have a greater attraction than anything smaller. Baiting was attempted on several occasions with the use of CO<sub>2</sub> and it was found that catches were doubled over the nights not baited.

We plan to build another large trap and further continue studies with lights and CO<sub>2</sub> until cold weather prohibits practical experiments.

### Southern Mosquitoes in Maryland

By W. A. Connell

The writer has had several opportunities in recent years to collect insects in the Pocomoke Swamp. This cypress swamp, which according to Beavan and Oosting (1939) is the most northerly of its type in the United States, is located on the Eastern Shore of Maryland along the Pocomoke River in Worcester and Wicomico Counties.