the State to prevent mosquito problems on future projects. The long-range goal is to assist in the establishment of sound, adequate programs in those States which have mosquito problems.

The program, in all its ramifications, is a positive one, to aid and assist in the fullest and most beneficial development of our water resources. We hope that, through this program and with the cooperation of all interested persons and groups, the factors which have produced serious mosquito problems on water development projects in the past will be eliminated from the projects of the future.

Community Volunteers and Mosquito Control

By R. E. DORER

Volunteer mosquito control work by the residents of Stony Creek, Va., brought the town relief from the usual mosquito annoyance during the past summer.

The Stony Creek Woman's Club initiated and supervised the project, the school children did the inspection work, and the townspeople cooperated by eliminating mosquito breeding places on their premises.

The woman's club, seeking a youth activity it could sponsor in the community as part of a national club program, turned to the Virginia State Department of Health for advice on the feasibility of a mosquito control project.

In June 1951, the bureau of insect and rodent control in the department inspected and analyzed the conditions in the Stony Creek area, an agricultural community of approximately 400 people in the southern part of Virginia, 75 miles inland.

About a mile from town, there is a fresh-water marsh area of several acres. After checking on the mosquito species in the marsh, the surveyors decided the marsh could be disregarded as a primary mosquito source. Few mosquitoes of these species would find their way into town. Subsequent light-trap catches confirmed the practicability of this decision.

Mr. Dorer is State director, Communicable Disease Center Activities, Public Health Service, and engineer in charge of the bureau of insect and rodent control, Virginia Department of Health, Norfolk, Va.

The drainage ditch running through part of the town was marked for treatment with oil insecticides by the town sergeant and was thus disposed of as an inspection problem.

The major part of eliminating the fairly heavy production of domestic mosquitoes would depend upon alert and systematic house-to-house inspections and cooperation of the townspeople, the surveyors decided. They concluded that a voluntary program using the older school children during their vacation period was feasible and promising.

A detailed plan of procedure, which placed all the responsibility for its execution on the citizens of Stony Creek, was accepted and put into operation July 1, following a brief training course in the field for both youngsters and grown-ups.

Approximately 20 school children participated in the work until September 30. The town was divided into numbered districts, and



A typical mosquito source found in Stony Creek and removed by the young inspectors in the mosquito control project.

two young inspectors were assigned to each district. Each week they were given a different district. The inspectors always requested permission from the occupant before they investigated a premise—and met with wholehearted cooperation.

The inspectors recorded on a report form the premises inspected, the number of temporary and permanent breeding places found, and the action taken or recommended. They submitted the reports to the committee in charge at the end of each week.

When mosquito larvae were found in temporary containers, such as cans, bottles, buckets, or pans, the inspectors took a sample to show to the tenant and got permission to empty the containers.

The permanent breeding places, such as rain barrels and pools, basements, and cisterns, which the inspectors could not remove themselves, were reported to the club supervisor of the program. These places, with the consent of the tenant, were sprayed when possible by the town sergeant with larvicide purchased with funds appropriated by the town council.

In a town without a municipal water supply, the rain barrels presented a control problem. Through elimination, screening, or treatment of the barrels, much improvement was shown during the summer.

Field records indicate that 1,057 temporary mosquito breeding places were found by the inspectors and were eliminated during the 3 months the plan was in operation. A light trap was set up and serviced by a different pair of inspectors each week. Nightly catches were forwarded weekly to the Norfolk office of the bureau of insect and rodent control for identification and listing. Analysis of these trap records indicates that on no night during the period the program was in operation were there sufficient mosquitoes to cause annoyance.

As may happen in such a volunteer program, responsibility for achievement fell upon a few. Fortunately, enthusiastic leadership carried the program through its trial period. It received a fair test, and its success was indicated by the generally favorable reaction of the public. Various persons expressed approval, but the almost universal cooperation of the townspeople was, perhaps, the best evidence that the commu-

nity regarded the project favorably. Mayor Philip Freeman wrote on October 17: "I personally feel that it was very successful . . . for the first time in several years, it was possible to play croquet in my yard during the evening without being eaten alive by mosquitoes."

Probably, the program will not be continued in its original volunteer form; but it seems to have served more than one definite purpose. The people of Stony Creek have been made "mosquito conscious." They will no longer take these insects for granted under the mistaken impression that nothing can be done about them. Any improvement in living conditions is welcomed by the people affected, and they are usually willing to make a reasonable contribution of money or effort to insure continuance. Firsthand familiarity with the mosquito and its habits may develop into a demand for permanent control.

The use of school children in such a project has several advantages. Continual efforts are being made to introduce subject matter of this kind into classrooms because of the educational value to children at this formative age when they readily absorb and retain information of future value to them. There is further advantage in having them acquire practical knowledge from actual experience that is half play. Further, such teen-age activities acquaint the youngsters with their future civic responsibilities and should help to make them better citizens. It, also, was noted that several school children living in the surrounding rural area participated in the preliminary training course and took back to the farms some knowledge concerning control of mosquito breeding.

Finally, there is the great mutual benefit to be derived from a closer association between the health department and the people it was created to serve. A health department and its bureaus are not austere and unapproachable organizations that can be called on only in an emergency. Anything that tends to break down such a barrier is of benefit to those on either side. The activity reported here has opened friendly relations, and it is believed that, because of this experience with mosquito control, the townspeople are much more ready and willing to seek advice and cooperation in connection with other problems.