

NEWS AND NOTES

HARRY H. STAGE is en route to French Indo-China, where he will take charge of malaria investigations for the Foreign Operations Administration. He had just returned from attending the Congress in Istanbul, Turkey, and will stop in Manila to attend the Pacific Science Congress and to confer with Dr. A. D. Hess and others in the Philippines. Mr. Stage may be addressed as follows: "U. S. Operations Mission to Cambodia, Laos and Viet Nam, % U. S. Embassy, Saigon, Viet Nam." Letters may be sent via the Department of State, Washington, 25, D. C., but must bear the regular postage, now 8¢ on the first ounce and 4¢ for each additional ounce.

IT HAS BEEN ANNOUNCED RECENTLY THAT DR. CARROLL N. SMITH has been chosen as Assistant Leader of the Division of Insects Affecting Man and Animals of the Bureau of Entomology and Plant Quarantine. This selection was made to fill the vacancy created by Mr. Harry Stage's appointment by MSA for work on mosquito problems in Indo China.

Dr. Smith has been actively engaged in research on ticks and insects affecting man and livestock for about twenty years. During the last several years he has conducted investigations on mosquitoes in Alaska, and recently has been Assistant Director of the Orlando, Florida, laboratory of the Bureau.—F. C. Bishopp.

MRS. ERNESTINE THURMAN is presently under U.S.P.H.S. assignment to the U. S. National Museum where she is working with Dr. Alan Stone on the taxonomy of the mosquitoes collected by her in collaboration with her husband, the late Deed C. Thurman, Jr., during their recent tour of duty in Thailand. She expects to remain in Washington for some months.

CAPT. HERBERT C. BARNETT, MSC, U. S. Army, is nearing the completion of his work at the U. S. Public Health Service Rocky Mountain Laboratory at Hamilton, Montana. Under the general direction of Dr. W. McD. Hammon, of the University of Pittsburgh School of Public Health, Capt. Barnett is studying *Culex tarsalis* and its relation to the encephalitides.

DR. GEORGE J. BURTON, who has contributed several papers to *Mosquito News*, writes as follows from Liberia, where he is with a mission of FOA (Foreign Operations Administration): "You may be interested in a few comments about our use of dieldrin. We are now doing house to house residual spraying with 0.3% dieldrin wettable powder and 0.3% dieldrin emulsion, the latter in good houses and the former in huts. Although it was absorbed (or adsorbed?) rapidly into the mud, and showed no apparent crystallization, its effectiveness was demonstrated almost

immediately. Our first spraying job was a very large Liberian Army camp, composed mostly of mud huts, in which the mosquito population was very large, and complaints were numerous. Beginning with the same day of the spraying, the mosquitoes diminished to such an extent that bed nets were dispensed with, and we haven't been able to find a single soldier who was bitten by a mosquito after the spraying. The British have found dieldrin to be effective for 9 to 12 months, so apparently one application a year is sufficient. We are working under pressure to complete the job, and have a long way to go before we complete the 4,500-5,000 huts and houses. When I get a chance, I hope to do some lab experiments on mud panels just to see for myself under controlled conditions just how effective the dieldrin is. We have also noted high kills of cockroaches and ants with dieldrin. We don't have very many flies at the present time, so I can't comment on flies. Our sprayers are well-protected with heavy coveralls, respirators, synthetic rubber gloves, and rubber boots. We're using 8002 Tee-jet nozzles and are getting excellent coverage."

FROM HARRY STAGE, Honolulu, Nov. 13: "Saw some good mosquito control business here. . . . Saw the colony of *Megarhinus brevipalpus* and they seem to be thriving. The larvae are reared in individual beer cans and they try to maintain 10,000. In the past 3 months 7,000 adults have been released and the larvae have already been picked up from natural containers. . . ."

FROM ALASKA A PHS MOSQUITO WORKER, Bill Frohne, reports on a most interesting and profitable three weeks of last summer, spent with the Katmai Project, a Scientific Reappraisal of the Katmai National Monument, Alaskan Peninsula, under the auspices of the National Park Service. The various participants of five Federal agencies collaborating included a geographer, six geologists, three biologists, and three archaeologists. They camped in the wilderness, and found Alaska's hordes of biting flies an infinitely greater impediment to their work than the summer's eruptions in this volcanically active region. Black-flies were exceedingly abundant in the flat tundra zone bordering on the Bering Sea, whereas mosquitoes usually constituted the chief insect problem on the beautiful lakes and mountains of the interior zone. Along the stormy and rockbound Pacific coastal zone (Shelikof Strait) bounding the National Monument on the east it was punkies, snipe flies, or mosquitoes which were the pests at various camps. It is hoped these studies may be continued next summer.—Arctic Health Research Center, Anchorage, Alaska.

FROM A LETTER TO H.L.T.: "At present I am working on Eastern Equine Encephalitis at the

Connecticut Agricultural Experiment Station, and have plans to try to colonize some potential vectors. Currently I am keeping a large number of *C. restuans* and may get a colony going for experimental purposes, but am not quite ready to report it yet in print, as I have some trouble with adult mortality due to insecticide-contaminated air and have to kind of keep my fingers crossed with all the colonies."—Robert C. Wallis, Medical Entomologist.

ESTABLISHMENT OF MOSQUITO CONTROL DISTRICT IN GALVESTON COUNTY APPROVED. An election to provide for the establishment and financing of a Mosquito Control District in Galveston County, Texas, was held November 7. The voters approved by a two to one vote the establishment of a Mosquito Control District with authority to levy a tax up to five cents per 100 on property valuation. Dr. Carl A. Nau, President of the Galveston Mosquito Control Association, states that his analysis of the vote which was very light is that all those opposed went to the polls and those who favored the District left it to someone else to vote. He further states that "Inasmuch as the county is now levying the maximum tax in the general fund that is permissible, we have a lot of juggling to get going—but juggle we will."—F. C. Bishopp.

DONALD R. JOHNSON, entomologist, has returned to Washington, D. C., after completing two years in Djakarta, Java, Indonesia. While in Indonesia he was assigned to the Malaria Section of the Indonesian Ministry of Health to assist with the malaria control activities as a part of the U. S. Point IV assistance to that country. At present he is assigned to the Division of International Health of the U. S. Public Health Service in Washington, and will be responsible for certain phases of the overseas malaria control programs, particularly in regard to insecticides, equipment, recruitment, and various entomological problems.

THE ALAMEDA COUNTY (CALIFORNIA) Mosquito Abatement District is one of the oldest and most progressive mosquito control organizations in the United States. The Engineer-Manager, Harold Gray, reports monthly to his Board of Trustees. The following items from the September report are of national and international interest.

The new Manager's Manual for the District, a Manual of administrative procedure on which we have been working for several months, was practically completed in September, except for the index. It covers over 500 typed pages.

A new key to the larvae of mosquitoes in the San Francisco Bay Region, prepared by Assistant Manager Aarons and Miss Bettina Rosay of the Bureau of Vector Control, has been completed and multilithed. The proceedings and Papers of the Twenty-First Annual Meeting of the California Mosquito Control Association, held at Sacramento last February, after a long delay are finally being printed. The Engineer-Manager is Editor.

On request, the Engineer-Manager has prepared and sent a paper to be presented at the Eighth Pacific Science Congress to be held in Manila, P. I. in November. The paper deals with the malaria epidemic at Lake Vera in Nevada County in 1952 and the successful mosquito abatement methods used in 1953 to prevent a recurrence of the outbreak.

We have also had a letter from Espanola in New Mexico, asking for advice on the control of mosquitoes in that area. The Engineer-Manager had discovered the presence of malaria at Espanola in 1920, at the unusually high elevation of about 6,800 feet above sea level, so he was able to offer some suggestions based on experience.

FROM MAURITIUS the Director of Medical Services has written that the Malaria Eradication Scheme has ceased to exist because the eradication of malaria from the island is an established fact. Another result of the application of insecticides over a number of years has been the elimination of *Aedes aegypti*.

THE GREATER WINNIPEG ANTI-MOSQUITO CAMPAIGN operated on an increased budget during 1953, but because of very heavy rainfall the mosquito population became so heavy that efforts to provide relief were not entirely successful. Mr. E. J. Stansfield asked for advice from a number of experts including Messrs. Twinn, Bishopp and Raley. They all agreed that good results can not be expected unless consideration is given to elimination of breeding areas and spraying to kill larvae. About half the Winnipeg funds were spent in larviciding and the rest for fogging. Additional appropriations are being requested to improve and augment the source reduction work.

RESIDENTS OF SANGER, CALIFORNIA enjoyed a season of comfortable evenings, free of annoyance from mosquitoes, according to newspaper reports. The Sanger area consists of about 250 square miles, and is part of the Consolidated Mosquito Abatement District of which Ted Raley is Manager. Clyde Bryson, who is in charge of the work at Sanger, reports that encouraging results have been obtained through an educational program and through preventive measures directed toward source reduction. A large project involved digging a drainage canal through two miles of river bottom to eliminate back water that previously stood all summer. Emphasis has been on larviciding rather than fogging during the 1953 season.

THE UTAH MOSQUITO ABATEMENT ASSOCIATION will hold its annual meeting, March 19-20, 1954 at Magna, Utah. A fine program is being arranged and it is hoped that all interested personnel will be able to attend. More complete information on the meetings can be obtained by writing to Lewis E. Fronk, Sec.-Treas. of the Utah Association at 2441 Grant Ave., Ogden, Utah.

ECONOMIC ENTOMOLOGY AT WORK IN THE NAVY. During the past year, the Bureau of Yards and Docks, in cooperation with the Bureau of Medicine and Surgery, has initiated a program to effect Navy-wide control for insects and rodents of military importance. Large economic losses due to infestation of military supplies, structures, and vegetation, in addition to the manhours lost from disease-bearing and nuisance pests have proved the value of establishing economic entomologists on the technical staff of the Bureau of Yards and Docks and in the Naval Districts. These technical consultants work with the supply personnel in the protection of subsistence and other stored products, with the Medical Personnel in organizing effective disease vector control and with trained control personnel to control household and vegetative pests. At the present time the positions of economic entomologists as Director, Pest Control Division, are established on the technical staffs of the District Public Works Officer at the following locations: Fifth Naval District, Norfolk, Virginia; Sixth Naval District, Charleston, South Carolina; Eighth Naval District, New Orleans, Louisiana; Tenth Naval District San Juan, Puerto Rico; Eleventh Naval District, San Diego, California;

Fourteenth Naval District, Honolulu, T. H.; Fifteenth Naval District, Canal Zone, Panama.

—George L. Hutton

DON MICKS writes that he has left Galveston for an academic year at the Universita di Pavia, where he has been invited to continue his biochemical studies of the *Anopheles maculipennis* complex as a complement to the work of Dr. Frizzi on the salivary gland chromosome patterns. Micks will work at the Instituto di Zoologia and also plans to spend time with Mario Pavon. His expenses will be underwritten by Fulbright funds.

THE CALIFORNIA MOSQUITO CONTROL ASSOCIATION has approved the following motion: "That the California Mosquito Control Association, Inc. underwrite the expenses of sending one (1) or more delegates to each annual meeting of the AMCA and it is hereby recommended that the delegate be the CMCA president, whenever feasible. The total sum to be allocated for this purpose (is) not to exceed \$500.00 annually, but in no case shall the CMCA share more than one-half (½) of the normal expenses involved in sending one or more delegates."

VIRGINIA MOSQUITO CONTROL ASSN.

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