

NEWS AND NOTES

CHESTER ROBINSON, who has been Manager of the East Side Mosquito Abatement District at Modesto, California, for the past fifteen years, has been selected by the Board of Trustees to succeed to the managership of the Alameda County Mosquito Abatement District.

The Skeeter, news organ of the Virginia Mosquito Control Association, has a thought-provoking article on light traps, which is worthy of republication for those who may not have seen the original. In part, it says, "In 1954, the Bureau of Insect and Rodent Control continued to encourage mosquito commissions to maintain light traps in their districts, and offered the technical services of its personnel to identify and keep records of trap catches and to relay pertinent information to the men in the field. A single collector made daily rounds of 17 traps over a period of 18 weeks, records of each collection ordinarily being available by the end of the day it was received. 24,689 mosquitoes (were) processed, identified, and recorded during the 18 weeks period. 20,417 of this number were females, which gave an average figure of 9.53 per night (per trap), on the basis of all the traps operated.

"The *Mosonia perturbans* plague of spring and early summer was unusually severe at Virginia Beach during the past season and is especially exasperating to Supt. Carter because their breeding grounds in adjacent Seashore State Park remain inviolable by any except nature lovers with a horror of the successful operation of modern engineering conservation.

"The *Culex* family continues to rank high on the list, although its general prevalence decreased more than 30%; *Aedes vexans* and *P. confinnis* picked their spots to make vicious sneak attacks, although *vexans* did show a welcome decrease from the 1953 total. The rest of the 24,689 included most of the list of ordinary species commonly found in this area.

"The immediate value of such a trap program depends largely on the promptness with which pertinent information can be obtained and relayed to field directors. The cumulative value increases enormously as comparative figures become available over a longer period and a larger area. Richard F. Peters (commented) in March 1954, 'An important corollary to the growing mosquito problem is the need for measurement of mosquito occurrence in order to be able to depict accurately the trend and the success of the prevention or remedial program.'

A PREGNANT QUESTION FOR ALL CONTROL WORKERS, though couched in humorous vein, is also offered by the *Skeeter* in the same issue. Superintendent Carter, of the Virginia Beach area, quotes a four-year-old constituent as saying, "The mosquito men have been around, Grandpa. I

smell 'em." The *Skeeter* comments, "Perhaps it would pay to publicize this identifying odor or add a little popular perfume to glamorize our work with the ladies." (We assume that the mean to glamorize their "work," not their "work with the ladies,"—A. W. M.) "How about trying a touch of 'My Sin'?" the *Skeeter* adds: "Any suggestions?"

MILTON H. BUEHLER, of the Lane County Health Department, Eugene, Oregon, sends in a scientific note, a "Preliminary Report on Recently Developed Thermal Fog Generator."

"A large capacity thermal fog generator has been developed by the Mosquito Control Section of the Lane County Health Department, Eugene, Oregon. This equipment is a modification of the Plumber's Nightmare, King Size (T. G. Raley, *Mosquito News*, 12(3):141-144). It has a capacity of 52 g.p.h., produces a uniform fog, and has proven effective in the field for the reduction of mosquitoes at distances of one mile under all normal weather conditions.

"This piece of equipment is powered by a h.p. Wisconsin air cooled motor which is connected by belt drive to a high pressure blower and two Bendix gear type pumps. The blower has a six inch inlet and outlet, turns at 6,000 r.p.m. and delivers air at the rate of 600 c.f.m. The air passes through a jacketed fire pot when the air is heated. Heat is provided by burning kerosene, atomized by a 3 g.p.h. Monarch burner nozzle at a pressure of 250 p.s.i. supplied by one of the Bendix gear type pumps having a capacity of 1 g.p.m. at 1,000 p.s.i. from a 1 gallon kerosene storage tank. Heated air from the fire pot passes into a Venturi type fog tube consisting of a 3" pipe tee reduced to 1 1/4" by short nipple and then enlarged to 4" by a two foot length of steel irrigation tubing, the opening of the 4" pipe is again reduced to 2 1/2". Fog oil, a 10% DDT-S/V Sovacide F solution, atomized into the fog tube by means of an atomizing nozzle (Spraying Systems Co. Nozzle No. 1/4 LNNSS26) inserted in a plug, fitting into the 3" tee, at the rate of 52 g.p.h. at a pressure of 125-150 p.s.i. by one of the Bendix gear type pumps having a capacity of 1 g.p.m. at 1,000 p.s.i. from a 160 gallon oil storage tank mounted on a two-wheeled trailer.

"A uniform fog is obtained by regulating the pressure of the kerosene burner nozzle and the fog oil nozzle. Slight adjustments in pressure enable the operator to compensate for temperature and humidity changes in the atmosphere which have an effect upon the dispersal and drift of aerosol fogs.

"During the 1954 mosquito control season was possible to operate this piece of equipment every night throughout the season regardless of weather conditions. Effective mosquito control was obtained at distances of one mile. Approx

nately one township, 36 square miles, was logged each night. Arrangements have been made with the U. S. Department of Agriculture, Agriculture Research Service, Entomology Research Branch, Insects Affecting Man and Animals, Corvallis, Oregon, to run a series of tests on this equipment to determine the average particle size, effective killing range, and the amount of thermal decomposition of DDT. A more detailed report will be submitted following the completion of these tests."—Milton H. Buehler.

OSCAR V. LOPP, who recently accepted the position of Entomologist for the South Cook County Mosquito Abatement District, in Illinois, writes that their plans for the 1955 season are already nearing final form and he extends an invitation to visit their activity and to see their operations, if by chance members of other areas can get away from their own problems long enough during the season to pass by Chicago.

HARRY STAGE, too busy to write a letter, sends the agenda of the Malaria Conference for Western Pacific and South East Asia Regions, held 15 to 27 November 1954, in Baguio, Luzon, the Philippines. For those who have never been to the Philippines, Baguio is a mile-high mountain city, whose clear, cool air offers an almost toothily relief to sweltering lowlanders, who have to play golf to keep warm. Harry adds the note, "This Baguio place, after a year in the heated lowlands is a real honey. I'm enjoying it no end. After the conclusion of this interlude, a group of five Vietnamese and I shall go around the Philippines and Taiwan in an effort to find training facilities for our own nationals. Regards to all, Harry."

The list of participants includes such well-known people as Dr. Luang Ayurakit Kosol, of Thailand, for whom the late Deed Thurman named a new genus of Thai mosquitoes, *Francisco Baisas*, of the Philippines, Dr. Robert H. Black of Australia, Dr. Antonio Ejercito, of the Philippines, Professor Kaoru Morishita, of Osaka University, Japan, Dr. H. de Rook, of Netherlands New Guinea, Travis E. McNeel, of FOA, the Philippines, Dr. Paul Russell, of Rockefeller Foundation, Dr. G. R. Villanueva, of the Philippines, Dr. Francisco Dy, of the Philippines, Don J. Pletsch, of WHO, Taiwan, and many others, including Harry and his associate Dr. M. E. Farinaud.

LAWRENCE B. HALL, in charge of equipment development for the Savannah laboratories of the J. S. Public Health Service's Communicable Disease Center, departed on January 19 for Geneva, Switzerland, where he will serve for six months as a consultant to the Expert Committee on Insecticides of the World Health Organization. Larry's previous assignments have taken him to such far and near places as China (1941-2), Bombay and Karachi, India (1942-3), Atlanta, Ga. (1943-49), Tehran, Iran (1949) and finally back to Savannah. While on his assignment to

Geneva, he will replace temporarily Mr. J. W. Wright, the Secretary of the Expert Committee, while Mr. Wright is attending graduate school at the University of Minnesota.

MR. WILLIAM J. BUCHANAN has been announced as the new Engineer-Manager of the South Cook County Mosquito Abatement District. In addition to serving some six years as a sanitary engineer in the Medical Service Corps of the Army, during World War II and the Korean war, leaving active duty with the rank of Lt. Colonel, Mr. Buchanan has served as advisor in North and Central Viet Nam and at home, with the U. S. Public Health Service, in Indiana, Mississippi, South Carolina and California. He has been in charge of shoreline improvement at all TVA reservoirs and was chairman of the Work Group on Mosquito Control and Allied Problems of the Arkansas-White-Red River Basin Inter-Agency Committee, immediately prior to accepting the position in Illinois.

WILLIAM C. FROHNE, WHO SENT IN A NOTE ON THE ALASKAN *Aedes* SPECIES INFESTED WITH MERMITHID WORMS, to supplement the article by Jenkins and West in the September *Mosquito News*, sends the following supplemental note on a species not yet listed for these parasites:

"(3) One mermithid in a 4th instar *Aedes excrucians* (Wlk.) collected 19 May 1954 from a semi-permanent *Carex* pond near Copper Center, Alaska. From this same pond 6 other entirely unparasitized collections were made in May and June 1953 and 1954. The pond is intermediate in type so that 6 species of *Aedes*, one each of *Culex*, *Anopheles*, and *Culiseta* breed there before it dries up late in July."

California Vector Views in an article by Tommy Mulhern, reports that the East Side Mosquito Abatement District, in cooperation with the Modesto Irrigation District, has been successful in installing more than 100 pumps at strategic collection points where excess irrigation water can be safely and economically returned to the canals for reuse. Seventeen agencies have cooperated in the formation of a water conservation committee which is trying, through voluntary modification of individual programs, to develop water resources to optimum condition with no conflict among the various interests. "With estimates of a doubled population in the State for 25 years," the report goes on to say, "irrigation will have to be expanded from 7 to 17 million acres to provide the necessary food."

IN SAN JOAQUIN COUNTY, CALIFORNIA, meanwhile, the Board of Supervisors has, after 6 years of effort on the part of civic groups, authorized the formation of a mosquito abatement district. This district, of approximately 1,000 square miles, will include Tracy, Stockton, Manteca, Escalon, Farmington, and Ripon. Present plans call for operations to begin on July 1. The Northern San Joaquin County Mosquito Abatement District,

formed in January 1948, was scheduled to annex some 200 square miles prior to November 15.

S. F. BAILEY, R. M. BOHART AND L. J. BOOHER have combined in the production of an excellently-written and illustrated pamphlet entitled, "Mosquito Control on the Farm," issued as Circular 439, by the University of California. The booklet contains 28 pages and is filled with sound guidance in water and land management, and the most effective methods of mosquito inhibition and control. It may be obtained without charge.

WHO'S WHO IN A.M.C.A. LEADS US TO FOUR WELL-KNOWN MEMBERS FROM OUTSIDE THE UNITED STATES. DR. H. DE ROOK, for thirty years with the Public Health Service of the Netherlands East Indies, and since 1948, chief malariologist of the Netherlands New Guinea oil companies is located at Sorong, Netherlands New Guinea.

DR. ABDUL RAHIM, of Shahre Nai, Kabul, Afghanistan, has for the past five years been Director General of the Malaria Organization of Afghanistan. As might be expected of one living in that country, he admits he is a passionate hunter. Dr. Rahim was born in 1909 in Quetta and graduated from high school in Germany, after which he attended Friedrich Wilhelm University in Berlin and received his doctor's degree in 1939. Dr. Rahim organized and headed the Malaria Organization of Afghanistan, which has trained its own personnel and has continuously expanded operations until, at the end of 1953, nearly 1,000,000 persons were being protected.

DR. CECIL R. TWINN, well known as an entomologist of the Canadian Department of Agriculture, in charge of the Veterinary and Medical Entomology Unit of the Division of Entomology, has had a past history which we do not all know. Born in London, England, he migrated to the U. S. in the spring of 1914 but left to enter Canada at the outbreak of the war in order to join the Canadian Army. He received his B.S. from the University of Toronto in 1922, his M.S. from McGill and Ph.D. from Ottawa. Besides having been the president of the American Mosquito Control Association, he is also a past president of the Professional Institute of Public Science of Canada, a Fellow of the Royal Entomological Society of London, and a member of the Entomological Society of America, the Entomological Society of Canada, the Entomological Society of Ontario, the Agricultural Institute of Canada, and an honorary member of the Canadian Pest Control Operators' Association.

DR. LUIS VARGAS, head of the Institute of Health and Tropical Diseases in Mexico, D.F., who received his M.D. from the University of Mexico and Master of Public Health and of Biological Science from Johns Hopkins and Mexico, respectively, is also a member of many important scientific organizations, including the National Academy of Sciences of Mexico and the

W.H.O. Malaria Experts, Parasitic Diseases Experts and Insecticides Committees. From the National Academy of Sciences he received the Carnot Prize in 1952.

THE EIGHTH ANNUAL MEETING OF THE VIRGINIA MOSQUITO CONTROL ASSOCIATION was held on February 24 at the Monticello Hotel in Norfolk, Va. The Association, which has a membership of about 272, had an attendance at the meeting which was somewhat in excess of the 110 who registered. Members of the A.M.C.A. attended from New Jersey (Bob Vannote, Lester Smith and Dan Jobbins), from Washington. D. C., (W. C. McDuffie) and from North Carolina (Charles M. White) and there were representatives of the Navy, the Army Corps of Engineers and the 15 mosquito control districts of Virginia. A very full and well rounded program was presented during the two sessions, which included papers on local problems, new insecticides, species evaluation, the importance of training and of specialist supervision, the continuing value of basic permanent-type control and the need to utilize proper mechanical equipment in the face of present-day increased labor costs and decreased diligence. Mr. William S. Coburn, City Manager of Hampton, Va., who testified to the importance of mosquito control in his part of what has become the largest metropolitan area in Virginia and one of the largest concentrations of military installations in the world, added a thought which found favor with all. He asserted that while Rollic Dorer had attempted to teach him the difference between *Anopheles* and other long-name species, he felt that they all belonged in a super-genus *Mephistopheles*. Mrs. L. Crawford Syer, a grand-niece of Dr. Carter, late Surgeon-General of the U.S.P.H.S. and a famed mosquito fighter, told of her community's successful efforts to arouse interest in formation of a mosquito-control district. She also reminisced of the tale, which she remembered in her childhood hearing her granduncle tell, of his use of cows to protect the embarking troops of World War I at Hampton. Seems he drove the cows in between the troops and the mosquitoes with the predictable but nonetheless highly satisfying result that the troops were left much more alone. The address at luncheon was by Dr. Edward H. Jones, pastor of the First Presbyterian Church of Norfolk, who told of his chaplain days in Alaska during W.W. II and the interest there in mosquito control, and then spoke movingly and effectively on Brotherhood Week, saying that mosquito control was one evidence of brotherhood in action but pointing out that in general ethics have lagged far behind science in the rush of progress.

RALPH C. BARNES, who has been entomologist with the Insect and Rodent Control Section, Chief of the Insect and Rodent Control Section and lately Chief of the Field Training Section of the U.S.P.H.S. Communicable Disease Center in Atlanta, Ga., has been announced as an Assistant

Chief of the Center's Training Branch. In his new assignment, Mr. Barnes will take charge of the nationwide training facilities of the Branch.

THREE NEW MOSQUITO ABATEMENT DISTRICTS HAVE BEEN FORMED IN THE CHICAGO AREA within the last two years. The possibility of forming other new districts is evidenced by the many requests for information received by the Des Plaines Valley Mosquito Abatement District.

The Lake Bluff District has been in active operation for the past two years. Its boundaries coincide with those of the Village of Lake Bluff and adjoin the Lake Forest District to the south. Dr. Robert L. Woolridge is President of the Board of Trustees and Mr. Thomas J. Evert is superintendent.

The Glen Ellyn District in DuPage County was established in July, 1954, and will begin field operations in the near future. The district includes the Village of Glen Ellyn and some adjoining areas, approximately six square miles. Mr. Willis Collins is President of the Board of Trustees.

The South Cook County District, established in 1952, has finally disposed of all litigation and is now making plans for operation early in 1955. This district of approximately 360 square miles with a population in excess of 500,000 includes all of Cook County south of 87th Street, and adjoins the southern boundary of the Des Plaines Valley District. Dr. Edward J. Czarnetsky is resident and Mr. William J. Buchanan, Engineer-fanager.

FROM THE REPORT OF THE FIRST MOSQUITO CONTROL CONFERENCE in the State of Oregon held in Division of Sanitation and Engineering, Oregon State Board of Health, Portland, Oregon, December 15, 1954. (Members of the Oregon State Board of Health, assisted by many other vector control workers in the state, planned and conducted the conference):—

Verne C. Reiersen, Chief, General Sanitation Section, acted as chairman for the opening program. The opening address was given by Curtiss F. Everts, Jr., Director, Division of Sanitation and Engineering. Mr. Everts outlined the trend of vector control requirements that have been made during the past several years. He noted specifically the mosquito control work, as well as other insect control, will continue to be an increasing problem in Oregon for a number of seasons known to everyone in attendance. Everts so commented on the basic needs for planning and conducting workmanlike vector control programs. One of his points was the need to provide more workable legislative statutes that would be feasible so that requirements of all the areas within the state could be administered under satisfactory local administration. Mr. Everts welcomed all persons in attendance on behalf of the Oregon State Board of Health and endorsed the proposed principles of planning for and developing an association that would be singly concerned with vector control activity.

Dr. Ralph R. Sullivan, Director, Industrial Hygiene Section, Oregon State Board of Health, led a discussion on insecticides, their use and limitations. Dr. Sullivan presented to all persons in attendance a brochure of materials which included identification of pesticides, trade names of organic phosphorus insecticides, toxicology of agricultural chemicals used as pesticides (with particular reference to precautionary measures against organic phosphorus poisoning), respiratory devices for protection against inhalation hazards of dusts, mists and low vapor concentrations of certain pesticides. Sullivan pointed out the problem of proper labeling of insecticides confronting the public agencies. A review of the action covering registration of economic poisons by the State Department of Agriculture was given. Dr. Upholt, as well as Mr. Eddy, contributed significant points in response to the questions and comments presented by the group. It was agreed that any individual working for a public agency should utilize only those insecticides that are well-established to the industry both from the laboratory and research areas, as well as actual field use. The trend turning toward what might seem more effective and dramatic chemicals should be tempered in the light of the unknown, particularly if there is a greater known hazard in either handling or applying those chemicals.

Mr. Noel P. McKeehan acted as chairman of the following portion of the program, which included a mosquito control program report, given by Mr. John Huber, of the Department of Insect Control, City of Portland; a paper on the historical background of the mosquito control program leading up to the 1954 report, by Mr. Milton H. Buehler, Director of the Lane County Mosquito Control Program; an outline of the activities of the Douglas County mosquito control program by Mr. LaVerne S. Miller, Sanitarian; an outline of the proposed program for the Coos County area commencing next year, by Mr. C. E. Fields, Sanitarian; an outline of the present city-wide program as now conducted, by Mr. W. G. Hellie, Entomologist and Sanitarian, City of Salem, Marion County Health Department; and an outline of the problems and the need for a mosquito control work in Columbia County, by Mr. Bennie Rinehart, Sanitarian.

Mr. Milton H. Buehler was the moderator of a panel to discuss and answer questions on mosquito control programs and problems.

Mr. Reiersen acted as temporary chairman of an organizational session. Persons in attendance selected Milton H. Buehler as chairman and he in turn appointed Mr. John Huber and Mr. LaVerne S. Miller to work with him as a committee with all of the necessary privileges to make studies and appointments and to plan for the next meeting at which time a definite set of recommendations will be presented for action to indicate the title, purpose and objectives of said association. It was also unanimously agreed that Mr. Buehler would act as a representative

from this group at the forthcoming American Mosquito Control Association meeting to be held in Los Angeles, January 24-27, 1955.

THE UTAH MOSQUITO ABATEMENT ASSOCIATION held its 8th annual meeting on March 18 and 19, in Farmington, Utah. The program included a panel discussion featuring members of the U.S.P.H.S. field station at Logan, where Archie Hess is now Chief; a report from Dick Peters, President of the AMCA, on the joint conference of the AMCA and CMCA held at Los Angeles in February; reports and papers from California mosquito control men; reports and papers from Utah mosquito control men on problems of special interest in Utah; and individual reports which were headed "Highlights of the Districts," from the various Utah mosquito abatement districts. (Notes made by the Editor from an advance program contributed by Don Rees.)

A GROUP OF PEOPLE INTERESTED IN FORMING A NEW ENGLAND MOSQUITO CONTROL ASSOCIATION met at the University of Massachusetts on February 2 and 3. The meeting promptly revised the territory to include New York State and adopted the name Northeastern Mosquito Control Association. The purpose of this association is to pro-

mote the efficiency of mosquito control and related activities through the encouragement of research, development of procedure and the interchange of information. They hammered out a constitution and bylaws and elected a slate of officers, as follows:

President—Joseph F. Pannone, Mosquito Control Supervisor, Dept. of Agric., Veterans Memorial Bldg., 83 Park St., Providence, R. I.

Vice President—Lewis F. Wells, Supt., So. Shore Mosquito Control Project, 1120 Hancock St., Quincy, Mass.

Secretary-Treasurer—Robert L. Armstrong, Supt. E. Middlesex Mosquito Control Proj., 301 City Hall, Cambridge, Mass.

Member for one year—Frank Shaw, Associate Professor of Entomology, Fernald Hall, Univ. of Mass., Amherst, Mass.

Member for two years—Patrick Tocci, Needham Public Works Dept., res.—285 Central Ave. Needham, Mass.

These five officers constitute the Executive Board. There will be an Advisory Committee made up of one member from each State in the area included in the Association.

Main features of the meeting in addition to the business of organizing were (1) an account of blackfly control in New York State by Dr. Hugo



Officers of the newly formed Northeastern Mosquito Control Association. Left to right: Patrick Tocci, Frank Shaw, Joseph Pannone, Robert L. Armstrong and Lewis F. Wells.

umback, (2) a panel discussion on pre-hatch insecticide applications for mosquito control, (3) attendance as guests of the Eastern Conference of the National Pest Control Assn. during the session on insecticides and (4) a panel on supplementary nuisance pests: Greenheads, biting gnats and

midges. At the evening session Prof. Charles P. Alexander told of his observations in the Territory of Alaska and showed many beautiful color photos, taken during the several journeys which he and Mrs. Alexander have made in that territory.—R. L. Armstrong.

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