

NEWS AND NOTES

IN RESPONSE TO OUR QUESTION ABOUT NEBRASKA IN THE LAST ISSUE BILL RAPP sends us some further welcome information about the progress of mosquito control in that State. He says he believes that the main purpose of insect control programs is mosquito control but that in many areas equal emphasis is on fly and mosquito control and some of the cattle feeding and non-irrigated areas are interested only in fly control. Professor Rapp shows that he hasn't entirely put aside teaching, by enclosing a list of five municipal demonstrations and one-day schools put on this May in Nebraska by the State Department of Health, of which Bill is the entomologist. The subjects included selection of equipment and materials, methods of control, how to set up a community program and demonstrations of equipment in operation. LEWIS OGDEN of the USPHS Logan Field Station was a guest instructor. Legislative Bill 378, relating to mosquito abatement and covering formation, operation of and assessment of taxes for mosquito abatement (the bill hopefully says "extermination"), has been passed by the legislature but had not yet been signed by the Governor at the time Bill enclosed his copy.

A. RALPH BARR SENDS US A NOTE ABOUT DR. PAUL MÜNCHBERG, a German entomologist who, as some readers may know, is studying parasitic Hydrachnid mites and would like to receive some living material from American workers. The mites are taken alive, writes Professor Barr, from mosquitoes and other hosts, placed in a special tube made from a goose quill (which Dr. Münchberg supplies) and sent in a letter airmail to Germany. Anyone who is interested in participating in this study can get more explicit instructions from Dr. Münchberg at Gelsenkirchen-Buer, Breddestrasse 21 (Gymnasium), Germany. From 7 to 17 June, throughout August and from 23 to 28 October, Dr. Münchberg will be at Soest, Westfalen, Windmühlenweg 93, Germany.

MORE THAN ONE HUNDRED MEMBERS AND GUESTS ATTENDED THE MEETING OF THE VIRGINIA MOSQUITO CONTROL ASSOCIATION at Virginia Beach the 21st of February. Speakers included BILL MURRAY of the 5th Naval District, who discussed the past role and future prospects of the helicopter in mosquito control, LESLIE D. BEADLE, of the U.S.P.H.S., who discussed encephalitis, U.S.D.A.'s JOHN FLUNO, who told about the present status of insecticide resistance, DR. BILL BICKLEY, of the Univ. of Maryland, who discussed and showed slides of the gnats and midges known as "false mosquitoes," and a number of others.

CHARLIE WHITE SENDS US FROM NORTH CAROLINA'S SALT MARSH MOSQUITO STUDY COMMISSION the report to the Governor which was issued under date of January of this year. This report,

which is exhaustive but far from exhausting (to the reader, at least), covers thorough discussions of fresh water mosquitoes, mosquito-borne diseases, adverse effects of mosquitoes on comfort, economy and general welfare, the history of salt-marsh control in North Carolina, the standard methods of control, comparisons with control by military establishments within North Carolina and with that in other states, a survey of the engineering and biological requirements, the effects of control on wildlife and the ability of the localities to participate in the cost of a program. Emphasis is placed on the fact that merely "killing adult mosquitoes is the least satisfactory method," that "larviciding, no matter how long it is practiced, will never cure the mosquito problem," and the text brings out the major collateral benefits to be gained by permanent mosquito control measures; it ends with a proposed bill "To Be Entitled an Act to Authorize the Creation of Mosquito Control Districts, etc.," together with a map showing the areas where such districts will be needed.

AND SPEAKING OF REPORTS, THE ANNUAL REPORT OF ED WASHBURN'S TURLOCK, CALIFORNIA, MOSQUITO ABATEMENT DISTRICT marks a milestone in the history of his District, since it records the end of ten years of highly successful operation. During this ten years, the District has grown by petitions of annexation from 342 square miles to 966 square miles or 618,240 acres. Despite the well-known factors of increased inflation, increasing demands on the part of the public for bigger and better service, and decreasing effectiveness of insecticides and despite the additional factors of increased irrigation and the advent and almost explosive spread of a species of high biotic potential, Turlock has managed to keep going at the same tax rate, except for a slight rise for 1954, ever since 1948. Like North Carolina, Turlock lays emphasis on source reduction and notes a high and increasingly greater degree of cooperation on the part of its citizens.

THE CALIFORNIA MOSQUITO CONTROL ASSOCIATION'S ENTOMOLOGY COMMITTEE SPONSORED, on the last two days of March, a seminar on mosquito and gnat problems which are related to mosquito control activities. Forty-five persons attended and brisk discussions were held on four general subjects: the influence of the weather on mosquitoes, California tree hole mosquitoes, gnat problems related to mosquito control problems and factors affecting mosquito oviposition. Moderators were R. C. Husbands, J. N. Belkin, L. M. Smith and Marvin C. Kramer, and R. W. Gerhardt, respectively. A dinner meeting, preceded by an open house with Dr. Stan Freeborn as host, concluded the sessions and plans were laid for subsequent annual meetings, with the general

consensus that discussions in the future should include also other arthropods of medical and past significance.

JOHN MULRENNAN SENT US A LETTER ABOUT SENATE BILL 704 (which we received just too late for the March issue), in which he pointed out that the Bill, introduced by Florida's Senator Holland, had received the support of the Florida State Board of Health, Chamber of Commerce and Public Health Association, and of the American Public Health Association, as well as that of a number of states, and added that the support of State and Territorial Health officers and of mosquito control associations was solicited. The Bill, as many know, was introduced in January of this year and provides that "while recognizing that the control of mosquitoes is, and should be, primarily the duty and responsibility of the State and local governments concerned, hereby establishes a policy and program of (1) aiding and supporting . . . technical study and research carried on by State health departments and by other qualified research organization . . . (2) providing grants to aid States in the conduct of demonstrations for the purpose of developing methods for the control of mosquitoes, and (3) providing Federal technical facilities and services to aid States. . . ." Such bills have been discussed in AMCA meetings for some years and most of us seem to agree that it will certainly be desirable to have the principle recognized that properly successful local mosquito control programs are also a matter of national importance.

DON MICKS SENDS US WORD OF THE FURTHER GIANT STEPS TEXAS HAS BEEN TAKING in the establishment of mosquito control in that State. Dr. (Professor) Micks' letter reads, in part, "The Galveston County Mosquito Control District, under the direction of William M. Cox, has been host to mosquito advisory commissions and many other interested citizens from Harris, Brazoria and other Gulf Coast counties who have come to the district in operation. The responses received concerning the success of the Galveston County program have been most enthusiastic. Other counties are now planning to activate programs organized along similar lines. On a year around basis, one species, *Aedes sollicitans*, constitutes over ninety percent of the total mosquito problem. Other *Aedes* as well as species of *Psorophora*, *Culex*, *Culiseta*, *Anopheles*, etc. are poor 'runners-up'." Don goes on to say that only a brief ophthalmologic study made it apparent that not even a Texas salt-marsh mosquito can recognize county lines (Tush, tush, Don, Texas mosquitoes *know*, they just don't give a damn). Texas is getting so enthusiastic that without pausing to consolidate their growing inter-county cooperation, they plan their next meeting for Orange County so that they can start linking hands with neighboring parishes in Louisiana. Don is President of the Texas Asso-

ciation this year and Dr. PAUL R. MEYERS is the President-elect.

"OUR GOOD FRIEND HANNES LAVEN OF THE MAX PLANCK INSTITUT FÜR BIOLOGIE in Tübingen, Germany writes that he recently received the Stifterverband Award for the most outstanding research in the field of genetics in Germany," Don's letter continues. "This high honor comes as no surprise to those of us who have been following his investigations."

THE PROBLEM OF TREE-HOLE MOSQUITOES IN CALIFORNIA is, as has been noted previously in this section, of growing importance, particularly as control in other sectors becomes more and more effective. CHET ROBINSON and MARV KRAMER have met this situation not only by increasing their control efforts in the field but by the issuance of an excellent little eight-page primer to educate the public as to what the tree-hole breeders are and what to do about them. The Alameda County Mosquito Abatement District also reports that in addition to the satisfactory progress being made in their studies of non-biting gnats and midges of nuisance importance, their work with weed-killers in the soil sterilant class has been so productive that they plan to do "considerable weediciding of [their] drains this fall, in order to eliminate the necessity of larviciding some of them."

LES BRUMBAUGH REPORTS FROM HIS YOUNG BUT VIGOROUS SAN JOAQUIN (CALIFORNIA) Mosquito Abatement District, that, following in the path so earnestly urged by Virginia's ROLLIE DORER, they are using a goodly number of light traps to keep them informed on need and effectiveness of their control measures. They continue to have good success in working the property owners over to their side in the source reduction program, among these the owner and renter of some 300 acres of swampy land which has been one of the largest mosquito sources in the area.

OTTO McFEELY and FRANKLIN WRAY POINT OUT IN THEIR DESPLAINES VALLEY MOSQUITO ABATEMENT DISTRICT REPORT that the cost of control in their area in 1956 came to only "42¢ per capita, less than two packages of cigarettes." Cigarettes don't cost quite that much in California, thank goodness, but the point is well taken, just the same. They report that due to the widespread building boom in the Chicago area, some of their source reduction work has been reversed but that nonetheless they are still reducing the total mosquito-breeding areas.

SINCE COMPARISON WITH THE FINDINGS OF OTHERS IS ONE OF THE STIMULATING BENEFITS OF OUR A.M.C.A. it is of interest to read in the Desplaines Report that they make a practice of spraying or fogging, when it will not interfere

with routine operations, as a service for outdoor parties and picnics held by non-profit organizations such as churches, schools, Boy Scouts and Girl Scouts and various community organizations and celebrations. Light trap catches have been utilized to give some very informative statistics on mosquito species populations and also to serve as guides for the peak activity hours when fogging will be most effective during the atmospherically appropriate times of day. A study of resistance indicated that in a few spots there was some slight possibility of a low degree of it but that on the whole, DDT resistance is practically non-existent in the District.

THE MORRIS COUNTY MOSQUITO EXTERMINATION COMMISSION ANNOUNCES ITS NEW ADDRESS is now on Highview Avenue, Morristown, N. J., which runs off Hanover Avenue to the east, and one block south of Evergreen Ave. Their Post Office address is P.O. Box E, Morris Plains, N. J., and their telephone is the same as before: Jefferson 8-1538.

UNCLE HARRY STAGE, WHO IS ABOUT AS WELL KNOWN TO THE CITIZENS OF HIS NEW HOME TOWN PORTLAND AS HE IS TO MEMBERS OF THE A.M.C.A., was written up in the Sunday *Oregonian* Magazine on April 14, 1957, with pictures and everything. (The pictures show Harry sitting with his usual easy poise in front of a house in Vietnam, flanked by two Vietnam belles who are pretty much au naturel, but unfortunately well chaperoned by Mother, Father, Elder Brother and someone identified as Harry's Aide. Harry is seated, we note, *between* this handsome young aide and the above mentioned pretty girls!) Well, to get back on the track, the article is a short but well-deserved tribute to Harry and it has some little-known info we think you might like to have.

First of all, we take it you know that Harry was born in Crittenden, N. Y. at an early age and got his B.S. and M.S. from Syracuse University. He is married and the father of two children (his son is a physician) who have some time since put Harry into that select category known as Grandfather. Harry was a principal sparkplug in the U. S. Department of Agriculture for many years, at which time we'll let the *Oregonian* take it from there. "Stage came to Portland in March, 1931, as entomologist in charge of mosquito investigations in the Pacific Northwest for the United States bureau of entomology and plant quarantine, department of agriculture (sic. The *Oregonian* doesn't upper-case bureaucracy, so it seems.) Stage had had ten years' field experience in mosquito control for the St. Louis Southwestern railway. Working up the Willamette valley from Portland on a survey, Stage and his associate, C. M. Gjullin, found malaria and mosquitoes both plentiful." After discussing how they broke this up, the *Oregonian* continues, "In World War II he was

sent in 1943 to Hudson's Bay to test mosquito repellents. . . . In 1944 he made a mosquito survey of Alaska for the Surgeon General's Office. . . . The next year he was one of 18 specialists sent to Panama with two-engined planes to test the efficacy of spreading DDT over heavy jungle. Results were spectacular. . . . In 1945, Stage was sent to Mexico to review a program for controlling an *Anopheles* not found in the United States, by spraying the inside of houses with DDT in emulsion. The procedure was effective. . . . Late in 1945 Stage went into Dutch Guiana under auspices of the Aluminum Company of America, whose bauxite mining there was beset with malaria. . . . Stage tried [spraying the inside of houses] in Moengo, an isolated jungle town of 2000 inhabitants. . . . Back a year later to check, Stage found the thatched huts still insect proof. . . . A mosquito specialist really gets around. (This is the *Oregonian*.) In 1948 Stage made mosquito studies on islands north of the North American continent for the Canadian national defense board. In 1949 he went to Africa as guest of the British colonial office to review medical and veterinary entomological research in British East and Central Africa and the island of Mauritius. In 1953 he was a delegate to an international congress on malaria control that met in Turkey. . . . Stage in 1953 looked for a climax to his career . . . and as a result was sent on a 2½-year assignment to Indochina, now North and South Vietnam, Laos and Cambodia. While in Vietnam Stage discovered two previously unobserved species of mosquito, and one of them was named for him, *Culex stagei*. That one lays its eggs only in the cup of a jungle pitcher plant. . . . Talking with him, however, one gets the impression that his thoughts are on far horizons. The work to which he has devoted his life is only half done."

SEEING SAM EDGAR'S NAME ON A RECENT ARTICLE IN *Mosquito News* SENT OUR MIND BACK TO HAPPY DAYS TEN YEARS AGO IN THE PHILIPPINES. DR. S. A. Edgar of the University of Alabama, he is now, and his name has been more associated with chicks than with mosquitoes, of late, but then he was the ball of fire in malaria control for the Armed Forces Western Pacific, the residual command MacArthur trailed behind him as he moved into Tokyo. Malaria control had all but broken down then, and many people were laboring valiently to restore it and to improve it, a work only now coming to fruition, but none was more energetic or more enthusiastic than young Captain Edgar. (For a while he was even mere Lieutenant Edgar, in a flock of Colonels, but that never faded him.) Well, we all panted along behind, open mouthed, sort of. Maybe we ought to start off Who's Who with him. S. Allen Edgar was born in Stafford, Kansas, and received his B.S. from Sterling College in 1937, his M.S. from Kansas State in 1939 and his Ph.D. from Wisconsin in 1944. Re-

turning from the Philippines, he went to Alabama for 3 years, then for 2 years to Tahiti with the U.S.P.H.S. He's back at Auburn again now, working, as we said, principally on protozoan diseases of poultry but retaining a lively interest in mosquitoes, too. He's married and has two children and (since he didn't put *any* of this down on the back of his Who's Who form) we haven't any idea what his hobbies are, but remembering the Philippines, they used to be exotic birds, orchids, and making friends.

ARTHUR V. REGNIER, JR., another of our one-time leading lights in military malaria and encephalitis control, was born in Dublin, Mississippi in 1915, but was reared in Arkansas and Texas. He received his B.A. and M.S. degrees from Iowa State and from 1950, when hostilities broke out, to 1954, Art was a lead man with his control detachment mopping up on mosquitoes in the areas mighty far forward. Captain Regnier changed to Mr. Regnier after a hitch at the Army Medical Field Service School at Ft. Sam Houston, and went to Japan again for two years as a civilian entomologist, where he had first met his lovely wife. In 1956, he joined the U. S. Public Health Service and was detailed to the I.C.A. advisory group in East Pakistan, where he will be working on malaria control for two years. His new address is, he has asked us to note, APO 74, Box DAC, % Postmaster, San Francisco, California. Let's have a note or two from your area, Art! How's the photography there?

OTTO McFEELY claimed a couple of years ago that he was in his seventy-eighth year and retired, but all of us who have seen him in action as a mosquito control patron think he must be wrong on both counts. Like a well-known comedian on the radio and TV, Otto apparently just stuck at 39 and he is certainly far from inactive. After a full career as a journalist, however, including service in the Spanish-American and First World Wars, from which he departed with the rank of Major, he became actively engaged in promoting mosquito control and has been at it ever since. This started when his young daughter was badly bitten by mosquitoes in 1920, he says, and by 1927 the state legislature had been brought to see the light and enacted a law authorizing mosquito control districts.

CDR. JOHN M. HIRST of the U. S. Navy, MSC, and our President-Elect, hasn't been biographed in the Notes before, partly because he is so very well known to all, but principally because we were saving him to add lustre to a list of military mosquito control men which we've been meaning to run. Well, now that the Miami meetings are over, perhaps we'd better tell you about him after all. "Mo," as he is called, sometimes shortened to "Mighty Mo," was born in Indiana, Pennsylvania (that's what it says) in 1908 and

his first speech was delivered impromptu and with his usual dexterity en route to the arms of the nurse. (Knowing Mo, we judge too that she was a *pretty* nurse.) Besides acquiring degrees such as a B.S. from Bethany, and M.S. from Pitt and a Ph.D. from the same University, Mo has had a mighty varied background of professional activities outside entomology. At one time he was a professional musician, playing dance music and burlesque with equal aplomb and acquiring a breadth of adaptability which has not only increased his considerable gifts as a raconteur but ameliorated the austerity which might otherwise go with his also very considerable erudition. After ten years as a teacher, he entered the U. S. Navy in 1942, and has had a good deal to do with setting up control techniques in that Service, including the development of automatic disinsectization equipment for aircraft. He is also a member of numerous scientific societies including Sigma Xi and Phi Sigma. He is married to a charming lady who, like Mo, is active in community work, and they have two teen-age youngsters. Mo lists his hobbies as golf, micro-photography and model railroading, none of which he ever has time to practice, and neglects to add that he is a choir director, moving spirit in the Teen-age Club for service youngsters of the Bay Area, Boy Scouts and many other Good Works.

DR. FRED C. BISHOPP, whose address is still 8014 Piney Branch Road, Silver Spring Maryland, but who has been in California and Florida on another of his circle tours of the world, the hemisphere or at least America, writes that he was mighty sorry to miss the Miami meeting, a sorrow we all share. He sends us the following note:

"On May 9, 1957, in Elizabeth, N. J., the new headquarters of the National Pest Control Association was dedicated to the memory of the late William Oscar Buettner, outstanding Executive of that association for many years.

"The impressive dedicatory program was conducted by J. Edwin Sameth, Past President of the N.P.C.A. and member of the Essex County, N. J., Mosquito Extermination Commission.

"The dedicatory address was made by George R. Elliott, President of the N.P.C.A., 1943-44. The bronze tablet was unveiled by Mrs. Buettner, with her two sons at her side.

"Participating in the program also were: John K. Medoff, New Jersey Senate, Lewis W. Jones, President, Rutgers University, I. B. Carncross, President of the N.P.C.A. for 1955-56, Myron W. Smith, current president of the N.P.C.A. and the Reverend Charles L. Copenhaver.

"Some 20 states and 2 Canadian provinces were represented at the ceremony. Ten past presidents of the N.P.C.A. were in attendance and an even greater number of entomologists. Among the latter was a considerable number of official entomologists and fish and wildlife experts, several of

whom are actively concerned with mosquito work.

"The building was one of the fine old residences of Elizabeth, located at 250 West New Jersey Street. It is well adapted to the needs of the National Association, providing offices which include those of the Executive Secretary, the well-known entomologist Ralph E. Heal, and his staff.

"Mosquito control and research workers are finding pest control operators more and more interested in mosquito and fly control and ready to assist in furthering work against those pests. Members of the American Mosquito Control Association will be glad to learn of this forward step in the life of the N.P.C.A. and the recognition of the monumental contribution made by Bill Beuttner to the work of the Association. Dr. Heal and Dr. Speer will be pleased to have members of the A.M.C.A. visit them in their new home."

—Fred C. Bishop

THE NORTHEASTERN MOSQUITO CONTROL ASSOCIATION held its 3rd Annual Meeting in Providence, R. I. on February 14 and 15, 1957.

Highlights of the meeting were (1) discussions of Eastern Equine Encephalomyelitis; insecticide residues on plants and how mosquito control operators may avoid damaging crops and leaving objectionable residues, (2) a report of studies on the biology and control of Greenhead Flies, Gnats and Midges on Long Island, N. Y., and (3) a complete resume of the mosquito research being carried on by the Entomological Research Branch, U. S. Department of Agriculture.

During the business session the following officers were elected: Lewis F. Wells, Jr. South Shore Mosquito Control Project, President; Hugo Jamnback, N. Y. State Science Service, Vice President; Kerwin Hyland, University of Rhode Island, Executive Board Member for 3 years. Robert L. Armstrong, East Middlesex Mosquito Control Project, continues his term as Secretary-Treasurer.