

## NEWS AND NOTES

AUSTIN W. MORRILL, JR.

WE TOLD YOU IT WOULD HAPPEN AND IT DID! When we brought the news of HARRY STAGE'S new address, last fall, *News and Notes* successfully predicted that any address, however current, might not remain so for long. We were right! Our International Member may now be addressed at 423 Hutton Bldg., Spokane, Washington. Well, maybe we're fudging a little. It isn't much of a move, really, and he says it's only for week-ends right now, what with the busy season confronting him.

Harry also sent two interesting reports on recent conferences. One was a Short Course in mosquito control, held by Professor Harwood of the State College of Washington, at Pullman, on 6 and 7 May. Another was the mosquito control conference held in April at Othello, Washington. This latter was attended by 52 persons, including notables from nearby universities and health departments, as well as representatives of commercial concerns. Othello is the community where a mosquito abatement campaign was given impetus last year by a Junior Chamber of Commerce fundraising drive that raised three hundred dollars for an immediate air spraying and apparently sparked what turned into the present seven-county system of mosquito control districts. The Washington State Department of Health's Bulletin, Vol. 1, No. 8, for October, 1957 describes this and has a fine layout of photographs illustrating the control activities and including one of our ever-youthful Harry helping to map out the work. The meeting incidentally utilized DON MURRAY'S fine film on "The Pasture Mosquito," another instance of the way we mosquito control folks work hand in hand together all over.

OUR PRESIDENT, COMMANDER "MO" HIRST IS IN HAWAII, YOU THOUGHT, DIDN'T YOU? Well, he isn't. Like many another AMCAer, Mo has taken to rambling about over the globe. All strictly in his official duties, we hasten to say. He and Bill Cantelo, entomologist for the Navy on Guam, and a team of five, have been jaunting about over Japan, the Philippines, Taiwan, Okinawa and all that, and will probably just be getting back home when you read this. (Sigh!) All those lovely places!

DICK PETERS ANNOUNCES THAT HIS ORGANIZATION IS HAPPILY WELCOMING ALLEN RALPH BARR to the overall direction and coordination of the California Bureau of Vector Control's research program centered at Fresno. Dr. Barr has until now been Assistant Professor of Medical Entomology at the University of Kansas and his "Mosquitoes of Minnesota" is newly published by the

University of Minnesota Press. It was illustrated by Ralph's wife.

Dick also tells us that if the Governor signs the State of California budget (as he is expected to do, we might add), the Bureau of Vector Control is to receive \$50,000 for research on the control of gnats, which will be done via the *mosquito abatement districts*. This further points up the fact that the control of all noxious and vector insects is coming more and more to be considered by the public as an appropriate subject for mosquito abatement district consideration.

DON GRANT PREPARED FOR HIS BOARD OF TRUSTEES A REPORT ON THE MERITS OF TRUSTEE ATTENDANCE AT AMCA MEETINGS which is a real masterpiece and we wish we could print it here in full. However, his points are summarized as follows (Don's summary):

1. Conception of the total scope and varied aspects of mosquito control.
2. Understanding of organization and policies employed by similar agencies throughout the United States and the world.
3. Personal observation of slides, pictures, equipment, exhibits and demonstrations pertinent to mosquito control.
4. Knowledge of the cooperative work and benefits afforded by other types of agencies and commercial interests, and appraisal of advantages derived from inter-agency relationships in meeting mutual interests.
5. Direct discussion with other Trustees and workers which may aid in practical evaluation of personnel relationships, comparative views in analysing procedural efficiency and the significance of local problems which are often not for public release.

WE SHOULD TELL YOU MORE ABOUT THE FINE MEETINGS THE UTAH MOSQUITO ABATEMENT HELD IN OGDEN in March. Our note in the March issue was pretty brief and was written, in fact, *before* the meeting. We went ourselves and should report that the two days of sessions were filled with excellent reviews of work being done not only in Utah but also in Washington, California and elsewhere. The fact that good wildlife refuge management and good mosquito control are compatible was pointed out in one talk and Dr. George Knowlton discussed the place of education in the weapons of mosquito control. ARCHIE HESS and his cohorts of the Logan Field Station filled a session with a fine array of papers on evaluation of residual insecticides, studies of pasture irrigation practices in relation to mosquito control, the tests for resistance, use of traps and studies on

encephalitis transmission. A very well-rounded meeting, which was attended by some 350 persons.

ALSO AT THE MEETING we noted that ARCHIE was sporting his distinguished member's AMCA pin, as befits a president-elect, and HARRY was proudly wearing his Past-President's pin. We understand that MO HIRST got these pins up, and they looked fine.

INCIDENTALLY, it was pointed out that 80 percent of the people of Utah now enjoy protection from the ministrations (we guess that should be *through* the ministrations!) of mosquito abatement districts, and they are planning ahead to provide the more intensive work which will be required to take care of an expected 50 to 85 percent increase in population in the next ten years. A pretty good mark for others to shoot at!

GEORGE SIEMERS OF THE MOSQUITO CONTROL ASSOCIATION OF CLARENDON HILLS, ILLINOIS, sends in a letter which is pertinent at this time of year. From time to time we have run notes on accident potentials and legal liability in connection with adulticidal fogging operations. GEORGE writes that their association, which has been functioning for the past seven years with increasing success, has for the past two years made the practice of sending a letter to every family in their fogging area. This letter is also published in a local newspaper and in the magazine "Suburban Life," reaching more than 40,000 homes. "Although we larvicide farther afield," he writes, "our actual fogging operations are carried out in Clarendon Hills and Blackhawk Heights. Each year after the 'safety letter' was mailed, the kids virtually stopped playing in the fog. Local motorists are learning safety ways too. . . . We believe more safety publicity is not only necessary but vital." His letter asks that children be taught not to follow the fogging equipment, not to run in and out of the fog, not to ride bicycles and tricycles through the fog, either on the sidewalk or in the street, and that motorists trail along behind the fogger rather than try to pass it, or if in a hurry that they detour around the block. He'd like to hear from anyone with more ideas on safety in this situation, and so would we.

GEORGE THOMPSON SENDS HIS MARCH REPORT ON WORK IN HIS JEFFERSON COUNTY (TEXAS) MOSQUITO CONTROL DISTRICT, which emphasizes survey, thorough ground preparation prior to aerial spraying and the fundamental nature of environmental control measures, particularly ditch maintenance. As a result he was able to state that there was "no real heavy breeding," though some adulticiding was required. He reports his heaviest population was, at that time, *Culiseta inornata*, which was already tapering off, with *Culex* spp. coming second, followed by *Anopheles crucians*.

FROM "SKEETER," THE VIRGINIA MOSQUITO CONTROL ASSOCIATION'S LIVELY BI-MONTHLY PAPER, we learn that the exhibit which the Virginians created for the Washington, D. C. meetings with AMCA has been eliciting quite a popular response throughout their state, with requests for its showing coming in from cities as diverse in their settings as Roanoke in the mountains and Norfolk on the shore. The display consists of three panels, the middle panel 4 by 4 feet and the wing panels 2 by 4 feet, joined together by loose pin hinges so as to be readily disassembled. The general background of the panels is a light, neutral grey and a colored map of Tidewater Virginia, on plexiglass, is set in the middle panel. Brightly colored plaques representing the fifteen mosquito control districts are set around the central map and in each is a colored transparency of a photograph showing some phase of the work being done in the Old Dominion. Openings in the background panels permit light from lamps behind them to shine through these transparencies and the whole gives a very lively and colorful appearance. The Virginia Association has also prepared a bulletin entitled, "Mosquitoes and Their Control," for distribution by the various Commissions, and "Skeeter" proudly announces that copies have been furnished every school in Norfolk and to other schools as well, throughout the Norfolk-Portsmouth area.

ALSO FROM "SKEETER" BUT REALLY A NEWS ITEM FROM FLORIDA, we learn that a mixture consisting of 3 gallons of 90 percent malathion, 3 gallons of Lethane 384 and 94 gallons of No. 2 diesel fuel oil, is being recommended for fogging where there is hydrocarbon resistance. Is anyone else using this?

OTTO McFEELY AND FRANK WRAY HAVE SENT OUT THEIR THIRTIETH ANNUAL REPORT OF THE DESPLAINES VALLEY MOSQUITO ABATEMENT DISTRICT (ILLINOIS) covering 1957, and many of you have no doubt perused it with considerable interest and profit. Their comprehensive and attractively compiled report covers, among other things, such matters of general concern and speculation as the effects of flooding on populations, comparisons of treatments with mist sprayers and fog generators and the effect of DDT fog on goldfish. (Their conclusion on this last was that there isn't any.)

A LETTER FROM RUSS FONTAINE TO EARLE MORTENSON GIVES US RUSS' NEW ADDRESS IN ADDIS ABABA AND ONE TO DICK PETERS IS SO PACKED WITH INTERESTING MALARIA INFORMATION THAT IT OUGHT TO BE MADE INTO AN ARTICLE INSTEAD OF A NOTE. The address is U.S.O.M., % American Embassy, APO 319, Postmaster, New York, N. Y. Russ is living in the Ras Hotel in Addis, where his wife and boys have now joined him and they hope to locate a suitable dwelling very soon. At the time of writing Earle's letter, Russ had just completed a ten-day survey trip of some 2,000 kilometers, all but about 500 kilometers of

which were "fortunately by air." However, in Dick's letter a week or so later, Russ has lost some of his enchantment for air travel in Ethiopia, referring to the plane as being known locally as the "vomit comet." Inelegant but descriptive of many flights in many hinterlands.

We want to try to digest some of Russ' meaty letter, so here goes: "Malaria is probably the most important public health problem facing the nation. It's most severe in the fertile valleys with the greatest agricultural potential. In order to avoid infection, the people in these areas build their dwellings up on the high ridges and escarpments surrounding the valleys. They climb up to their dwellings before nightfall and move down again after sunrise to tend their cattle and their pitiful little gardens. In the broad valleys where the high places are many miles away, the people live with the disease as best they can.

"*P. falciparum* is the dominant species, but *vivax* and *malariae* make a good showing. The peak transmission season in the high plateau country occurs during and shortly following the rainy season which lasts from July through October. In other areas the rains come at other times or not at all in some desert areas. In other words, it's much like California. There's no set pattern to the climate throughout the country.

"*Anopheles gambiae* is the principal vector in most of Ethiopia according to the available information, which is far from being complete. There are about 12 other *Anopheles* species which may or may not be important. No one really knows very much about it so we have much entomological work to keep us busy in the future. The malaria situation is definitely one of natural origin, like the California problem prior to the advent of irrigation. The vectors are from the few swamps and lakes that exist in the country. As far as I can determine, there is nothing man-made about it. The people lead a simple, primitive existence and exert practically no control over their environment. Of course our job (ICA) is to help change this! Already irrigation projects are being initiated in some areas, roadways are being improved and extended, hospitals and schools constructed and so on."

Russ describes some of the other entomological problems, particularly flies and grasshoppers and goes on to say that both he and ROY FRITZ were bitten by tse-tse flies, Roy in a somewhat tender spot while laundering his sox in a shower. Neither Russ nor Roy got anything from the flies but we bet the flies got something from Roy!

ED SMITH HAS WRITTEN A LETTER TO DICK PETERS, TOO, to which he has added a postscript that he is now en route home but will stop off at Jamaica for a three months' malaria eradication training course, so that he will get to California in the middle of August. He plans to return to Djakarta and says that the Indonesian Government has pled strongly with DON REES to extend his tour, which Don would sort of like to do but

feels duty bound to return to his obligations in Utah, too. Ed says he and Don surely wished they could be in Washington (as did many of us chained to desks here in the little old prosaic U.S.A., Ed!) and also wish AMCAers could get out there to visit . . . and to help. Ed, Don and others have formed an entomological-parasitological society which is flourishing vigorously. He says that the revolutions and counter-revolutions are—so far—paper ones, but goes on to say, "Not many dull moments so far. Involved in the program are: 7,000 employees, 180 local programs (each Regency is roughly equivalent to a local mosquito district), 82 million people, a multi-million dollar budget, 90 odd anophelines, 3 thousand islands, from 13 to 17 provinces, depending on who is doing the counting." He says he also has "played bingo with the numbers called in Indonesian, Dutch, German, and in English for my benefit, visited a Dyak village where 100 percent of the men, women and children suffer from malaria in any given year, had a meal served by waiters carrying Bren guns and hand grenades, listened to machine-gun and rifle fire for 2½ hours during the middle of the night while on a week-end in the mountains . . . drunk arrack, tuak and brum Bali" and a good deal more. Are you still all in one piece, Ed?

ACCORDING TO PRESIDENT MO, THE FLORIDA ANTI-MOSQUITO ASSOCIATION HELD ITS ANNUAL MEETING at the Fort Harrison Hotel, Clearwater, Florida, from 27 through 30 April, 1958, thus answering our query of last issue. Also from Mo comes the report that the Illinois Mosquito Association meeting, which *California Vector Views* had predicted, took place all right at the University of Illinois in Urbana on 6 and 7 February. "At the Illinois meetings the program was star-studded with well known authorities," writes Mo, "which included Dr. Bailey B. Pepper, Rutgers University, LCDR F. R. DuChanois, M.S.C., U.S.N.R., Mr. P. Bruce Brockway, Jr., and Mr. Robert L. Vannote."

ED WASHBURN'S ELEVENTH ANNUAL REPORT OF THE TURLOCK (CALIFORNIA) MOSQUITO ABATEMENT DISTRICT contains pages and pages of good data on costs of various types of operations. As in previous years, Ed breaks his figures down to specific materials and methods and the conclusions are very enlightening. Obviously, airplane spraying isn't practicable or desirable for all situations, but it is interesting that Ed's figures show it to be only a little more than half as expensive as power spraying and this, in turn, is less than a third as costly as hand operations. In 1957, Ed did no fogging, using the time gained to extend inspection and source reduction. This latter, for Ed, is largely concerned with proper use of irrigation water, which farmers are beginning to appreciate now as a factor in good crops as well as mosquito control, and Ed also has some 80 miles of rivers with dense undergrowth. He also found time to gain the cooperation of the public in

eliminating over two-thirds of the backyard breeding sources uncovered by his inspectors. Altogether a busy year.

BY A STRANGE COINCIDENCE, THE NAME OF OUR LEAD-OFF MAN IN WHO'S WHO IN A.M.C.A. THIS TIME HAS ALREADY BEEN MENTIONED EARLIER IN THIS COLUMN. However, we'll give you a few more delicate little hints. This gent was born in Toledo, Ohio, where one of our distinguished members, Bruce Brockway, now resides. (Wonder if they know each other?) This event took place in 1915, and his education was accomplished, he says, by Albion College, Toledo University and the School of Hard Knocks. He has been a member of AMCA for 15 years, which makes him an Early Member, and his hobbies are variously gardening, photography and Doberman Pinscher dogs. He spent 6 years with the U. S. Navy on malaria control being first in the South Pacific in March of 1942. In 1945 he was with the Medical Research Unit No. 2 on Guam, right in the middle of a few years of violent mosquito revolution on that Island, when a number of AMCA experts took licks at the situation. He's been the superintendent of the Toledo Area Sanitary District for the past five years . . . what? We gave it away? Shux, so we did. Well, folks, this here's P. Bruce Brockway, Jr. We only had two more things to say about him. Before he was Super, he was Field Super of the Toledo District for eight years, so as we all know, he's an Old Hand at this stuff. And he has two boys, Porter Bruce III, who is seven, and Louis Herman, who is three. We'll bet they can both identify their mosquitoes already.

OUR NEXT NOTABLE IS ALSO AN OLD HAND, HAVING BEEN WITH US TWELVE YEARS, and in mosquito control for 14 years, 10 of them as manager of the Mosquito Abatement District of a very large county in California. He was born in Riverside, California, in 1911 and went to Junior College there before going on to the University of Arizona and the University of California at Davis and Berkeley. He has been Sanitarian for the health departments in San Luis Obispo, Riverside, Kern, and Tulare Counties and with the State health department. He has two children, too, a son, Douglas, and a daughter, Joanne, and his hobbies are fishing (and sometimes golf). Who? ART GEIB!

ONE OF OUR MOST REMARKABLE MEMBERS AND ONE UNIVERSALLY ADMIRER FOR HIS ABILITY IN MOSQUITO CONTROL HAS SO VARIED AND COLORFUL A BACKGROUND THAT WE BRING IT TO YOU JUST AS HE JOTTED IT DOWN. He was born in Pershing, Oklahoma, in March of 1920 and graduated from high school in Omaha (hold it!) Arkansas. His civilian occupations have been farmer, grocer, butcher, lumberjack, school teacher, service station attendant, truck driver, mechanic, railway telegrapher, insurance investigator, wine cellar foreman, public weighmaster, radio repairman,

carpenter and mosquito abatement. He is too modest to add "expert" but we will do so. We are glad that he finally found his niche in mosquito abatement, where he no doubt finds some of all that background useful in running a program which includes use of several radio-controlled vehicles and an airplane or two. His military background, also varied, includes radio operator, mechanic and engineer, communications chief, U.S.A.F., and overseas duty with the military mission in Moscow. With all this, he also got a sanitary engineering degree from the I.C.S. and for five years has been applying everything to an expanding and challenging mosquito abatement problem in a district of rapidly growing population. Oh, didn't we tell you who we're talking about? It's JOHN BRAWLEY, of the Kings County (California) Mosquito Abatement District.

DICK BOHART WAS BORN IN PALO ALTO, CALIFORNIA BUT WENT TO CAL ANYWAY and received there (in Berkeley) his B.S., M.S. and Ph.D. He is presently Associate Professor of Entomology at his Alma Mater's Davis campus and in between was at U.C.L.A., in Los Angeles, and with the Navy. He was LCDR there in the U.S.N.R. and says he still has a sentimental regard for it, as well he might, for his Navy bulletin on the "Mosquitoes of Okinawa and the Islands of the Central Pacific" and "The Mosquitoes of Japan and Their Medical Importance" were Bibles to dozens of us in mosquito control in those parts. He spent most of 1945 on Guam and Okinawa, etc., and also was back there for seven months in 1951 under the auspices of the Pacific Scientific Board, the Office of Naval Research and the Department of the Army. As we all know he has published quite a bit on the mosquitoes of this part of the world. Dick has been a member of AMCA since 1947 and has been teaching 15 years, so we'll call him an Old Timer, too. He's one of the few real pure, high-minded taxonomists we know who can manage to make systematics and the tortuous complexities of nomenclatural orthodoxy sound both rational and practical. His talk on this at the California Association meetings went a long way toward reconciling many of us to the necessities of this rocky road, which field men are often apt to want to brush aside, we find. (Anyone for mixed metaphors?) Anyway, Dick's one of our many members who mix erudition with practical ability. He lists his hobbies, single-mindedly, as insect collecting in all phases.

THOSE WHO HAVE KNOWN ONE OF OUR NEWER MEMBERS, CORNELIO M. URBINO, in the Division of Malaria of the Department of Health in Manila, will be interested in a letter recently received from him. He writes, "I have been busy lately, because of the implementation of the surveillance program that naturally accompanies our malaria control. In addition to this, I am also working in the control of axil breeding mosquitoes that transmit filaria. I have tried dusting,

spraying and fogging with various insecticides. So far, spraying with DN or DDT is the best."

A LETTER FROM GEORGE BURTON, WHICH ARRIVED JUST AS WE WERE PUTTING THIS IN THE MAIL, informs us that his next assignment is as advisor on Filariasis to the Technical Cooperation Mission, % American Embassy, New Delhi, India. His main headquarters will be at the Institute of India, in Delhi, with field headquarters in south India, at Ernakulam near Cochin, Travancore, Kerala area, near the southwest tip. Sounds like a live problem and an interesting place to work on it, George!

THE CALIFORNIA MOSQUITO CONTROL ASSOCIATION'S SECOND ANNUAL ENTOMOLOGY SEMINAR was very successfully held on 28 and 29 March at the Fresno State College campus, with forty-eight members in attendance. The group included managers, entomologists and other technical people from mosquito abatement districts, county health departments, the State Bureau of Vector Control, the United States Department of Health, Education and Welfare, the United States Navy and various colleges and universities. An opportunity was afforded for all present to join in the discussions, each of which was led by a well-qualified moderator whose opening and stimulating remarks were scarcely needed to start the dis-

cussions rolling. Discussions from the floor can sag badly sometimes, but none of these did, even for a moment. DON MURRAY led the discussion of "Mosquito Control when the Environment Changes," which brought up the problem of creating a *new* problem while controlling an old one; ART SMITH gave aid and comfort to those who are concerned with fighting flies of public health importance; BUCK BELLAMY and DICK HUSBANDS led the discussion of "Mosquito Colonies," including the use and value of colonies, membrane feeding of arthropods, autogenous colonies, and such esoterica; and DICK BOHART gave a lucid and sympathy-arousing discourse on the troubles of workers in mosquito nomenclature. DICK's talk was the only one which got no back-talk, largely because no one felt qualified to argue with Dick, but he did get a lot of lively interest and many questions from us peasants. Dick was quick to point out that taxonomists were caught in the same toils as the rest of us: no solution is satisfactory, yet order must be maintained somehow. A dinner meeting was also held, at which BRYANT REES presented some magnificent color slides of a trip down the Colorado River, rugged but beautiful. The meetings were under the auspices of the Entomology Committee, headed by LEON HALL, and will be held next year at Riverside.

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## ANNOUNCEMENT

The South Cook County Mosquito Abatement District is accepting applications from qualified candidates for the position of Field Engineer. Experience in dragline and dozer work is desirable and the applicant should be eligible for Illinois registration. The appointee will supervise the field engineering program and salary will be commensurate with qualifications and experience, in excess of \$8,000 per year for an experienced man, plus transportation, liberal vacation allowance, Blue Cross-Blue Shield, etc.

Applicants should write to the District, P. O.  
Box 30, Harvey, Illinois.—W. J. Buchanan, Engineer-Manager.