

NEWS AND NOTES

AUSTIN W. MORRILL, JR.

WE CAME BACK FROM OUR ANNUAL ACTIVE DUTY TRAINING WITH THE ARMY SURGEON GENERAL SO FULL OF ENTHUSIASM OVER SOMETHING THE ARMED FORCES PEST CONTROL BOARD IS DOING THAT WE'VE JUST GOT TO SHARE IT WITH YOU. Starting from an idea germinated by CAPT. DICK HOLWAY and developing rapidly under CAPT. DON DE COURSEY, Lt. Col. FRANK FAVORITE and Capt. DALE PARRISH, and not forgetting Lt. Col. JACK GEARY, present Secretary of the Board, the Military Entomology Information Service has organized a specialized information cataloguing and retrieval system which has us gasping. By means of punched reference cards and a color-number code which brings the reference out of the files in seconds, it is possible to assemble a listing of all the references to any medically important insect, published since the system was started and a good many published before that. Each is identified by name of author, by title, by sources and often has a summary of the findings, as well. The system is known as "an optical coincidence, inverted file system for input, storage and retrieval, coordinated with an electronic semi-automatic writing-coding unit and an electrostatic reproduction center." This means (which is what made our eyes bug out) that the cards are just put back into the drawer in any old order yet can be plucked out again without a moment's hesitation; and the listing can be run off onto a page, with all the others under the same subject heading, by one of these fancy typewriters that runs away all by itself, sounding like the famous thousand monkeys in the British Museum, as it gobbles up punched tape from one roll and reels it up on another.

The point of telling you all this, aside from the fact that you may want to add Forest Glen (a section of Walter Reed Army Medical Center) to your sightseeing list for Washington, D. C., is that this data retrieval isn't just for the military alone, though it is primarily so, of course. No indeed; if you, as a governmental agency like, say, a mosquito abatement district or a university, want to know all the papers published on the control of *Aedes aegypti* and on the biology of disease transmission by the Culicidae since 1960, a simple request to the Military Entomology Information Service, Forest Glen Section, Walter Reed Army Medical Center, Washington, D. C. 20012, and presto . . . you'll have it. Of course, you'll have to wait your turn in line, if there's a rush on. And, also of course, you'll probably find that a large majority of the worthwhile papers are already on your desk in *Mosquito News*. But that's the beauty of the thing to us. It tells us what—all we already have on hand. (We hope the guy that indexes MN doesn't get sore at us for implying that his index is no good! But

blessed if *we* can remember what year we read something!)

WELL, OF COURSE, THERE ARE A FEW OTHER JOURNALS. WE ASSUME ALL AMCA'ers take (and read) *Pest Control Magazine* and so are fully aware of Editor JIM NELSON's new "Mosquito Control" Section therein. However, we feel it only proper, since we welcomed Jim's mosquito News and Notes colyum in *PC* with a feeble jest, to hail his expansion of the column to a section. And we note with pleasure its auspicious start with a lead article by DON SCHLISSMANN and Nora Magennis on the *Aedes aegypti* eradication program in which so many AMCA'ers are now involved. In the welcome, we are joining ourselves to Pres JOHNNY MULRENNAN and SECY TED RALEY, who spoke for AMCA more eloquently.

SO MANY PEOPLE QUIZZED US AS TO WHAT THE DEVIL WE MEANT BY PHEROMONES (all we meant was to be reporting it accurately) and since it wasn't *our* word in the first place, we thought we'd bring you the word, courtesy of Dr. A. RALPH BARR. Ralph sends us a reprint of an article entitled, "Pheromones (Ectohormones) in Insects" by Drs. Peter Karlson and Adolf Butenandt of the Max Planck Institut für Biochemie, in which they explain how it seemed to them that "ectohormone" was a contradiction in terms and that the concept of hormone ought not to be stretched too far. They proceed: ". . . we should like to propose to name such substances 'pheromones.' The word is derived from the Greek *pherein* (to carry) and *horman* (to excite, to stimulate). 'Pheromone' should designate substances that are secreted by an animal to the outside and cause a specific reaction in a receiving individual of the same species, e.g., a release of certain behavior. . . ."

SO THAT'S HOW IT IS. We applaud new words which aim at preventing the blurring of meanings of already established words and surely this one meets that criterion. Next question?

DR. MANABU SASA went from his post in the University of Tokyo to be WHO consultant at the Faculty of Tropical Medicine in Bangkok University of Medical Sciences for the summer and wrote of a most interesting observation on "the role played by the small fish 'guppy' in the control of *Culex fatigans* in slum areas in this city, as it abundantly multiplies in sewage water pools under houses so that no mosquito larvae can breed. The fish is apparently restricted in its habitat to such highly polluted waters under houses where no other larger fish can breed, and the 'guppy'

seems to be especially adapted to breed in polluted waters. Its population reaches to about 10 adults per 20 cm square of water surface, together with numerous young. This fish is a native of South America and obviously has been introduced here artificially by someone. I would appreciate further information about this fish as a mosquito eater if you happen to know of it, as I have not seen any literature concerning this fact, although the top minnow has been so famous." Dr. Sasa's address by the time you read this will again be Institute of Infectious Disease, Tokyo University, Shirokaneda Machi, Minato-Ku, Tokyo, Japan. We'd be mighty interested to hear if anyone has any observations to add to this, too.

THE MIAMI (FLORIDA) HERALD HEADLINED "LEE AIRFORCE DOGFIGHTS MOSQUITOES" OVER AN ARTICLE ABOUT "MILLER'S MARAUDERS" which took up a page of the paper one Sunday earlier this summer. WAYNE MILLER'S *Marauders*, that was. DC3's they are, no less. The workhorse of the airways. The plane that won't say die. And with some wonderful photos that brought back memories of the malaria control work on Guadalcanal and other South Pacific isles, the article went on to describe Wayne's tedious work in converting the planes to mosquito spraying, including a bottom loading device and of course, tanks and venturis. Wayne has another plane, a C45-H for smaller areas, according to the article and can cover some 4,000 acres at a time with the big ones, so Ft. Myers and environs can expect to be mi-i-ighty free of mosquitoes from now on. Those pictures showed Wayne's planes putting out a plenty nice pattern. Maybe he'll demonstrate at the meetings next spring!

DON REES, JIM MACLAREN and WALLY MURDOCH had a fine get-together in the Canal Zone from July 24 to August 8, when Don was down there as a visiting consultant on the invitation of the U.S. Army Surgeon and the Health Director of the Canal Zone. Also included in the entomological agenda, according to Jim, was a bit of social life, including *suki-yaki* and reminiscences of the Orient. Jim asks us to pass on the word to any young medical entomologists with four years of experience and the yen to follow in the exalted footsteps of Col. William Crawford Gorgas, that there is now open a position as a GS-11 (new step-1 salary \$8,650 plus 15 percent differential and fringe benefits of group health, life insurance and generous leave privileges). The job is with the Canal Zone Government and Form 57 obtainable at any Post Office should be sent to the Personnel Director or through Jim. WE have a copy of the Position Description, if anyone is interested in seeing it before applying. It sounds like a real slick chance at some fascinating experience.

ED DAVIS SENDS US A LETTER FROM DR. MAGDALEN SZTANKAY-GULYÁS of the State Institute of Hygiene in Budapest, a Good Neighbor member

reporting some very interesting work being done by herself and her colleague Dr. Johannes Szabó under the directorship of Dr. Ferdinand Zoltai. Dr. Sztankay-Gulyás writes that, "... last year Sztankay-Gulyás, in which 45 species are dealt was published a monograph with the title "Biting Mosquitoes in Hungary," by F. Mihályi and M. with and the control given of important species. If you are interested, I will send it to you with great pleasure.

"Our country has along the Danube, *Aedes* calamities and around Lake Balaton, *Anopheles* and *Aedes*, as well as *Culex molestus* problems. The control work is carried out yearly as the degree of calamities requires and, of course, there is surveillance of the *Anopheles* as a malaria vector.

"There are many methods and materials (insecticides) used on a large scale and there are pilot-research items at the Institute. We are using residual spraying and thermal aerosols against the adults. The last method is not so widely spread. The insecticides used belong to the DDT-BHC group and on the other hand are organophosphorus ones (Diazinon, Fenthion). Malathion is at present under experiment.

"The control work against the larvae has a pilot character. Allow me to send a picture about a control work with a Swingfog in a park of Héviz. [Snapshot was enclosed.] I am mailing publications for you and we would be very glad to be in exchange.

"May I mention that we should be very glad to give some help in your work—if we can perhaps send collections of larvae or mosquitoes and please let us know how we can participate in the work of the [Good Neighbor] Committee."

Ed sent this in May, unfortunately too late for the June issue and we are sorry to be so long in bringing it to you but perhaps it will not be too late if anyone wishes to arrange exchanges this season. As for "participating," we think Dr. Sztankay-Gulyás and the Institute personnel are participating very well in the Good Neighbor work right now. We shall be very interested to hear more.

WELL, THE ESA HAS DONE IT AGAIN. They are always putting up two or three of our members at one time as candidates for the Presidency of that organization and this is NOT FAIR, definitely NOT FAIR! How can we make a choice? Well, at least it gives us a chance to review their biographies. Like this time it's HUGH GRAHAM and KEN QUARTERMAN. We gave you a Brief Biography on Ken way back in March 1957 and he hasn't changed much (*you* haven't changed at all, Ken) except to become Program Officer for Environmental Health of PHS in Washington and all. HUGH was in the December issue. He hasn't changed either except that he is now Investigations Leader in Livestock Animals Investigation (though still interested in mosquitoes and other vectors of interest to man) and he is a Lt. Col. in the Army MSC Reserve,

unless he has one-upped us and joined AL BUZICKY as a full (or chicken) type. Well, as we said, it's going to be a hard choice, mates. Demme if 'taint.

DON JOHNSON is leaving the AID program and the Department of State, after more than 13 years of continuous work with the overseas malaria control programs, and is now attached to the *Aedes aegypti* eradication program with CDC in Atlanta. We begin to think there is going to be one high-powered mosquito man for every *aegypti* loose outside a laboratory but it *does* sound like a very exciting program and we wish Don (and all the rest) very happy hunting.

NOT TO PUT THE MILITARY FIRST NECESSARILY BUT WHILE WE ARE ON THE SUBJECT, a number of military AMCA'ers are undergoing the perennial AMCA game of musical chairs. Lt. F. W. KUTZ, for instance, has left Delaware for the Medical Field Service School (712th Preventive Medicine Co., really) at Ft. Sam Houston, Texas; Lt Jg R. V. PETERSON has escaped from the Marines on Okinawa and is now with Preventive Medicine Unit #2 at NOB, Norfolk, Virginia; Major W. H. YOUNG has also left Oki for the 5th U.S. Army Medical Laboratory, St. Louis 63102; Major JOHN SCANLON meanwhile has also left the Asian area (SEATO Lab) for the Walter Reed Army Institute of Research, in Washington, D. C. 21112. BILL WYMER, continuing the movement into the Eastern United States, returns from Puerto Rico to Charleston, South Carolina, 20407, the Sixth Naval District, and JOHNNIE COBB moves from St. Louis to Co. D, SF TNG GP (RTC) Ft. Bragg, North Carolina. Dr. DOUGLAS GOULD, however, reverses the trend by going out to the SEATO Medical Research Laboratory, APO 146, San Francisco, 94000.

USMAN M. ADHAMI recently dropped two letters from his address and left Indiana for India, where his address is now Dept. of Zoology, Muslim University, Aligarh, U.P. WAYNE HARRIS moved over from Lake Charles to Gulfport, Mississippi, where he is in P. O. Box 101. The Rev. ROBERT VANDEHAY (that's VandeHay), left Mainz, Germany, for St. Norbert College, of W. de Pere, Wisconsin; Dr. HERB DALMAT has likewise left Yurrop for 2127 R Street NW, Washington, D. C. while Dr. J. R. GORHAM has gone from Maryland, to USAID, APO 271, New York, N. Y., and CHARLES GERHARDT is now listed at the much-mentioned *Aedes aegypti* Eradication Project of CDC, c/o Puerto Rico Health Department, Ponce de Leon Avenue, San Juan.

DON REES REPORTS THE FIRST FOLLOW-UP WE HAVE HEARD ABOUT ON THE WILDLIFE MANAGEMENT AND MOSQUITO SUPPRESSION CONFERENCE WE REPORTED IN JUNE. "A field trip was planned and conducted on June 12, 1964, by committee members of the Utah Mosquito Control-Fish and Wildlife Management Coordination Committee,"

he writes. "Forty-four individuals participated in the field trip, representing the following agencies or organizations: the Agricultural Research Service, Weather Bureau, Fish and Wildlife Service, Bureau of Reclamation, Geological Survey, Utah Department of Fish and Game, Utah Department of Health, Office of the State Engineer, University of Utah, Utah State University, Utah Country Health Department, and several private duck clubs and mosquito abatement districts.

"The field trip started at the 12,000 acre Farmington Bay Waterfowl Management Area where, in addition to the usual waterfowl management facilities, a mosquito light trap is maintained, a weather data station is in operation and a sentinel chicken flock for encephalitis surveillance has been established. The next stop was the Wheeler Machinery Test Area where mosquito production and water management practices are being evaluated. . . . Box lunches and cold drinks were served at . . . a privately-owned shooting club where development of water management facilities has been underway for a number of years. . . . The field trip was very informative for many in attendance as this was the first time they had seen these cooperative programs in operation. . . .

"Members of the Utah Committee are: Jessop B. Low, Fish and Wildlife Service, Donald A. Smith, State Department of Fish and Game and Don M. Rees, University of Utah." A great big E for a very fine Effort, DON!

AS NEW MEMBERS, WE WELCOME Professor EDWIN KAJIHIRO, Head of the Dept. of Biology, Wayland College, Plainview, Texas, along with ERNEST G. MEYERS, of USOM, APO 156, San Francisco, Lt. L. C. RUTLEDGE of WRAIR, Washington, D. C., 20012, CHARLES GARY of Ho-Ho-Kus, New Jersey, FRANCIS LEE of Vancouver, B. C., FREDERICK LESSER, of St. Augustine, Florida, LARRY ROSEMAN of Chestnut Hill, Massachusetts, ARTHUR SALO, of Oberlin, Ohio 44074, and such exotic and corporate new members as Sumitomo Kagaku Kogyo K. K. (Hi, DuPont!) of Osaka, Japan, the Near East Animal Health Institute, of Teheran, the Sankyo Kabushiki Kaisha, of Tokyo, the Universidad de Brasilia Biblioteca Central, of Brasilia, Distrito Federal, Brasil, the University of Baghdad, Abu-Ghraib, Iraq, and (briefly) the College of the Ozarks; and, seeming almost prosaic, the library of the University of Massachusetts, one of the fountainheads of entomology, once known as Massachusetts Agricultural College, in Amherst.

IN ORDER TO HELP THEM KEEP ABEAST OF THE LATEST DEVELOPMENTS IN CHEMICAL CONTROL, WATER MANAGEMENT, IDENTIFICATION AND VARIOUS BIOLOGICAL ASPECTS OF MOSQUITO CONTROL, NEW JERSEY HAS INSTITUTED AN ANNUAL SHORT COURSE FOR MOSQUITO EXTERMINATION COMMISSION EMPLOYEES at Rutgers, the State University. This year the course was given for three days, March 25th to 27th.

The curriculum was set up by Dr. E. B. Pepper, Manley Jobbins and Dr. Lyle Hagmann, who is now referred to as "Dean of the Short Course." The course attendance was 41, with all counties actively engaged in mosquito control represented.

With the success of the March short course for permanent employes, a number of Executive Secretaries and Superintendents, at a meeting of the Associated Executives of Mosquito Control work in New Jersey expressed a desire to have a shorter course presented in June for temporary summer employes who return year after year. Many Commissions are not in a position to have large numbers of inspectors and laborers on a year round basis so they are dependent on college students for labor and older men, mostly school teachers, for inspectors. The inspectors oversee and handle labor crews in the field and render a report to the Commissions. These inspectors were afforded the opportunity to be exposed to the total mosquito control picture in New Jersey and throughout the world. The attendance was somewhat smaller because of the season but comments from those who attended indicated a sincere interest in the material presented.

It is hoped that both the spring and summer short courses will continue and grow.—(Submitted by Harry T. Smith)

ONE OF THE OUT-OF-STATE AMCA'ERS WHO WAS INVITED TO PARTICIPATE AS A GUEST IN THE FIELD TRIP OF THE ASSOCIATED EXECUTIVES OF MOSQUITO CONTROL WORK IN NEW JERSEY has sent in an appreciative account of the trip which is presented here in slightly condensed form. The group met on the morning of June 17 at the research center of the American Cyanamid Corporation in Clarksville, New Jersey.

After being guests of the Corporation in the morning and for noon luncheon, the motorcade proceeded to the Mercer County hydraulic dredge project. In the middle of the afternoon the group traveled to Hightstown to visit the R.C.A. Space Center. The executives of this center first gave a very informative explanation of their work and then afforded the opportunity actually to get into the work areas and construction areas of the center itself. In the late afternoon the motorcade left for Penns Grove where most of the participants stayed at a motel. After a fine dinner there was an informative discussion and all those in attendance discussed or mentioned the advancement on problems within their particular areas.

Mr. Fisher, Mr. Hilliard, and Mr. Jackson explained what was to be seen the next day, June 18, at their particular areas of Salem and Gloucester. On the morning of the 18th the motorcade left the motel and visited the Silver Lake - Locust Island area within Salem County, returning to the motel for lunch. The afternoon was spent in visiting control problems and projects in the Gloucester area.

Dan Jobbins, secretary of the Associated Executives, was assisted by R. Ostergaard, H. Struck-

man, H. Black, E. Potter and H. Fisher in planning this two day field trip.

AMCA members who are especially interested in field operations were particularly pleased to be able to participate in this trip, to see what is going on in the state where so much of the world's information on mosquitoes and their control has been developed. *Mosquito News* would welcome specific accounts of some of the highlights of this trip from some of the New Jersey people themselves, by way of operational notes or articles.

Aedes vexans GROUP MEETS AT TVA: UNDER THE SPONSORSHIP OF THE AMERICAN MOSQUITO CONTROL ASSOCIATION, and with G. S. Christopher, Chief of the Vector Control Branch of the Division of Health and Safety of the Tennessee Valley Authority acting as host, a small but enthusiastic group of mosquito control workers met at Wilson Dam, Alabama, on May 18 and 19, 1964, to study the breeding habits of *Aedes vexans*.

The group gathered Monday evening at the Muscle Shoals Hotel in Sheffield, Alabama, for an informal get-acquainted session and to list the topics of primary interest. The members of the TVA staff that were acting as hosts presented a brief outline of the agenda for the following day.

On Tuesday morning the group was welcomed to TVA by G. S. Christopher, Chief of the Vector Control Branch. Mr. Christopher explained the functions of the branch as related to the overall TVA program and gave a brief orientation which included the history, nature, and purposes of TVA's involvement in mosquito control. He emphasized the agency's unique system of water level management practices for the control of permanent pool mosquitoes and how these practices might affect favorably or adversely the production of floodwater species, primarily *Aedes vexans*, in the Tennessee Valley.

Dr. G. E. Smith, Chief Biologist, explained the intricate control of water levels in TVA's system of freshwater lakes as related to navigation, flood control, mosquito control, and power production interests.

Dr. S. G. Breeland then gave a brief discussion of the *Aedes vexans* problem in the Valley and showed a film of the areas in which they work and of their experimental cages and plots. He also had slides showing the distribution of the mosquito species within the plots and, in particular, the densities of *Aedes vexans*. His experiments were mainly concerned with the number of floodings that would continue to produce *Aedes vexans* where it was not possible for new eggs to be deposited. This was made possible by screening 96 square foot plots to prevent oviposition. He had records, currently, of 12 floods in these plots with a considerable number of *vexans* eggs still hatching. His charts indicated that the population densities had dropped to about half of those in the open plots, which were controls for the screened plots.

Following his presentation there was a general discussion by the group on their experience in multiple broods produced by periodic flooding and of their laboratory experience with cut sods and their productivity.

There was also a considerable amount of discussion on egg sampling techniques and the use of the equipment in the laboratory as well as the meaning of the quantity of eggs found per sample.

This briefing was followed by a field inspection of the experimental area (McFarland Bottom, Pickwick Reservoir, Florence, Alabama) where an actual flooding of the test plots was conducted by pumping water from the adjacent river. The group witnessed the hatching of *Aedes vexans* within 30 minutes after inundation.

A short sightseeing trip was conducted to Wilson Dam and Wilson Dam Lock en route to lunch. The group witnessed the lockage of a U.S. Coast Guard work barge through the largest single lift lock (100' lift) in the world.

After lunch the group reassembled at division headquarters for a trip through their 3 well-equipped laboratories, 2 of which are concerned with rearing and research in handling and hatching of *vexans* eggs. Some of TVA's activities that were observed by the group are as follows. They routinely obtain viable eggs by artificially mating mosquitoes. Dr. Breeland demonstrated this technique which is a modification of the McDaniel-Horsfall method. They also carry a colony of *Anopheles quadrimaculatus* for their routine biological and chemical work. They have developed several interesting innovations for handling their mosquitoes which will be helpful to all of us.

Eugene Pickard of the TVA staff demonstrated egg separation methods and discussed problems relating to the storage of *Aedes vexans* eggs for future uses that require larvae or adults.

TVA maintains records of mosquito populations and has a collection of all species that have been found in the Tennessee Valley. They are currently making a collection of all the arthropods of medical importance in specific areas of the Valley.

At the close of the laboratory tour, the group assembled for a group picture and dispersed for the remainder of the afternoon. The group reassembled for dinner and a formal discussion of the various problems each had with *Aedes vexans* in his home area, with R. L. Vannote acting as chairman and moderator. Mr. Brockway spoke for the Toledo District in Ohio, Mr. Doane for the Cape Cod area in Massachusetts, Mr. Kornafel for the South Cook County area in Illinois, and Mr. Allen for the Macon County district in Illinois. Mr. Pierman spoke for Essex County in New Jersey, Mr. Vannote for Morris County in New Jersey, and Mr. Smith for Middlesex County. Both Mr. Struckman and Mr. Ehrenberg commented on conditions in Bergen County, New Jersey.

The conference was adjourned after spokesmen for the AMCA and TVA exchanged mutual appreciation for a most successful conference.

DR. H. P. S. GILLETTE was for many years a regular attendant at our meetings and an active and valuable participant in the discussions; his absence was noted by many at the Chicago meetings and shortly thereafter word of his death was received. We know that many will join us in feeling his loss. He will be sadly missed.

LT. COL. FRANK FAVORITE whose unparalleled energy has been so big a factor in the rapid ascent of the Military Entomology Information Service to unparalleled efficiency, as previously chronicled, is, we are saddened to report, leaving MEIS for George Washington University where, as Dr. Favorite, he will pursue what sounds like a most fascinating and challenging assignment and one he is well-qualified to fill. *Vale atque ave*, Frank!

FROM AN AID PRESS RELEASE: Dr. David D. BONNETT, a former resident of Gloucester, Mass., and now a resident of 1108 Kooahoo Drive, Kailua, Oahu, Hawaii, recently completed seven years of service as a malarialogist with the foreign aid program in the Far East. He first served in Indonesia and was transferred to the Philippines in 1962. At the latter post, he was instrumental in setting up the Philippine Malaria Eradication Training Center (METC), the fifth world center in the global campaign against malaria, the only English-language teaching facility of its kind with an international responsibility. Dr. Bonnett was the first of three American experts assigned to the Center to assist with these responsibilities. He traveled beyond the country's southern island frontier of Jolo and down to his former post in Indonesia, across Malaysia to Thailand and as far as India.

A 1937 graduate of Harvard University, he also received his MA and PhD degrees there. He served on Harvard's graduate staff from 1937 to 1941, when he transferred to the University of Hawaii. In 1943 he joined the U.S. Public Health Service, with which he served until he joined the foreign aid program in 1957 and went to Indonesia. Following home leave, Dr. Bonnett expects to rejoin the USPHS to serve at the Communicable Disease Center in Atlanta, Ga.

DR. VIMOL NOTANDA has left the Malaria Control Office in Chiangmai to go to the Division of Malaria Eradication of the Ministry of Health in Bangkok, and DICK HAYES has exchanged the rarefied atmosphere of Upper Level Massachusetts for the Rocky Mountain heights of Greeley, Colorado, 80632.

DR. R. HASMO SUGYARTO OF JAVA, INDONESIA, sent some over-generous thanks to AMCA and MOSQUITO NEWS in a letter to JACK KIMBALL and, via Ed Davis, to us all. Dr. Sugyarto writes from his office in Saltiga, "Thank you very much for your certificate of award . . . *Mosquito News*, which has reached me regularly, is of very much use to me and my colleagues, who are serving a big program of Malaria Eradication. In such a

program the important role of the vector, the mosquito, is not usually much recognized [nor the reason for] much time being spent in 'entomological surveys' before we can start. It is therefore my feeling that an appropriate knowledge of all factors (entomology, parasitology, man's ecology, etc.) is required for a leader of an eradication program. After a preparatory phase of at least six years, time which we spent in setting up pilot projects, training technicians, etc., the actual 'attack phase' began only late in 1958. But what would have happened with the program if there was not a constant alertness in entomology? Resistance of the main vector from the North Coast to DDT, behavioristic change of the same on the South Coast and lately resistance to DDT and Dieldrin of the rice-breeders, nearly made eradication of malaria impossible. It is therefore that I appreciate the work of the entomologist very much and, being a leader (Malariologist), the up-to-date knowledge of entomology which is needed. And this knowledge, among others, has been got from the Mosquito News, which publishes excellent articles. Thank you. Sincerely

yours, H. Sugyarto." And thank you, Dr. Sugyarto. We read you loud and clear.

GEORGE (BUDDY) SIMS has proselyted JOHN LAMB right away from the Virginia State Health Department and into the Fifth Naval District, VMCA's *Skeeter* informs us, somewhat plaintively, but with good spirit and well wishes, and we thank Virginia for having enriched our Navy thereby. *Skeeter* also reports still further expansion of the boundaries of its rapidly growing-mosquito abatement districts. This time it is the Virginia Beach-Lynnhaven Mosquito Control District and the Washington Mosquito Control District of Chesapeake. Furthermore, York County has entered the lists full steam ahead. Three of the Virginia mosquito control commissions have made arrangements for rental of uniforms which will serve to identify their men and keep them looking neat for good public relations. Each man will have five uniforms, for regular laundering, each identified by his name and a mosquito control shoulder patch similar to the VMCA decal on the trucks. Sounds like a fine system.

LIST OF ADVERTISERS

	PAGE
American Cyanamid Company.....	I
California Chemical Company.....	XVII
California Mosquito Control Assn.	XV
Chemagro Corporation	IX
Curtis Dyna-Products	XIV
Desplaines Valley Mosquito Abatement Dist.	XVI
Florida Anti-Mosquito Assn.	XII
Hausherr's Machine Werks.....	XI, XII
H. D. Hudson Mfg. Co.	X
Illinois Mosquito Control Assn.	XVI
Kaiser Jeep Corporation.....	VIII
New Jersey Mosquito Extermination Assn.	XI
Schild-Bantam Division	II, III
Shell Chemical Co.	V
Southern Mill Creek Products, Inc.	VII
Todd Shipyards Corporation.....	IV
Unit Crane & Shovel Corporation.....	VI
Utah Mosquito Abatement Assn.	XVI
Velsicol Chemical Corporation	XIII
Virginia Mosquito Control Assn.	XVI