NEWS AND NOTES

AUSTIN W. MORRILL, JR.

AS WE GREET YOU THIS MONTH TONY BROWN WATCHES US FROM THE FRONT OF THE BOOKCASE ACROSS THE ROOM, CLAD IN DIRTY WHITE COVERALLS, HAT PUSHED BACK, A QUIZZICAL GRIN ON HIS LIPS. He's there because he's prettier than the backs of our old Journals and, alas, it isn't really Tony at all but a wonderful candid photo. To remind us to tell you about TOMMY MULHERN's *great* collection of intimate portraits of our great AMCA'ers. How about having a Gallery of them at the next meeting? We know everyone would enjoy seeing them. WE think they ought to be brought out as a portfolio, Bul. 5, maybe. What do you think, Prez MULRENNAN and Board?

THE ENCEPHALITIS OUTBREAK IN HOUSTON FINALLY BROUGHT THAT CITY'S ATTENTION TO BEAR ON THE FACT THAT THEY HAVE FOUR GOOD MOSQUITO ABATEMENT DISTRICTS NEARBY and a seminar was called on 15 October to evaluate the "need" for a district of their own. The need had previously been lined out by OZ BRELAND who wrote, as President of TMCA, pointing out the presence nearby of experienced mosquito control men like J. G. FOYLE, J. C. MCNEILL, BILL MOON and GEORGE THOMPSON. Oz pointed out also that while Harris County had reported hundreds of presumed cases—and several deaths —from encephalitis, principally carried by *quinquefasciatus* in that County, the counties with abatement districts had had few cases or none. (Oz tells us that a quirk in Texas law actually prevented all but coastal counties from *having* districts(!), but this law has now been modified. At any rate, it had no bearing on Harris County.) Fortunately, they asked DICK PETERS, DON MICKS, FRANK VON ZUBAN and ANDY RITTER to attend the seminar the County then set up, and our men gave them The Word. *If* they were listening the voters of Harris County may be expected shortly to substitute planning for hysteria and to join the ranks of the righteous. We hope.

UNCLE HARRY HAS UN-RETIRED AGAIN!! Effervescent as always, Ye Olde Harry, writes, "In early June I was called to Moses Lake, Washington, to organize a mosquito control program with $10,000 obtained by public donations. The idea was I was to go up for a month, to plan, to buy, to hire, and to direct an area about six miles by four miles and 1200 miles of lake frontage with several large and small islands real fitten for mosquito breeding, *Culex tarsalis* mostly. So as I always said all you have to do is to find them and kill 'em. That we did, and everybody was elated with the results. I stayed up into August, in the heat, in the tules and up to my tailfeathers, and me feeling 90. But I know the country pretty well, as well as the people, so it was old home week, I mean months, and I was pleased and glad to have their gracious confidence. We used helicopters a lot because it was *cheap*! The company was interested and so did our work for $1.00 an acre! We used Baytex with excellent results. . . . Then, glory be, yesterday I got a letter from one of my friends up there, which said they had voted in a one mill tax levy, that will give them over $20,000, so they will be in good shape for next year. And so another district is born."

AND HAS CAPT ERNESTINE THURMAN NOW RETIRED because she has become, as of last June, Mrs. Dr. Clyde Swartzwelder, of 7800 Jeannette Place, New Orleans, Louisiana? We can't believe it (the retirement bit, that is) but we think Dr. Clyde is a very lucky man indeed and we wish Dr. Ernestine *every happiness*! But not retirement.

LIKE STEPHEN LEACOCK'S FAMOUS LOVER who was so elated when his loved lady accepted him that he jumped on several horses and rode off in every direction, ALBERT WEYER finds himself being three different persons in his new work in the Bahamas. He writes that he has left Africa and the Firestone Plantations Company and moved to "sunny—and gale-swept, hurricane-threatened—Grand Bahama Island. [The new address is: Colonial Research Institute, Freeport, Grand Bahama, Bahamas.] It is rather a peculiar position in that I work with three organizations and have a title with each of them. I am Research Associate on the staff of the Harvard School of Public Health, Research Scientist on the staff of the Colonial Research Institute, and Advisor on Field Hygiene to Her Majesty's Bahamian Ministry of Health."

CORNELIO URBINO HAVING BEEN MOVED UPWARD FROM THE MUD-ON-HIS-BOOTS STATUS, like so many other field-entomologists-at-heart, is now finding time to write up some of the fascinating and valuable observations he has made in past years, in such sectors as the one of exito-repellency now attracting wider attention. Those of you who have been in the Philippines, and know the problem on Mindoro, that lush island at Manila's doorstep, will be interested in his Department of Health bulletin on Socio-Economic Barriers to Malaria Eradication in Mindoro Island, scheduled for early issue. Cornelio says that he is also putting together notes on the control of *Aedes poicilius,* a filariasis vector, which breeds in the axils of widespread plants like *Musa textiles,* and when we lived there, was commonly said to bite workers freely during

the daytime operations in those abaca plantations. (Where all that Manila hemp rope comes from, you know.)

DR. SOLON DE CAMARGO, OUR GOOD DIRECTOR OF ALL THE AMERICAS SOUTH OF THE BORDER, writes to chide us for downgrading AMCA'ers to *Controllers*. Why settle for less than *Eradicators*, he demands, with tongue only half in cheek, when our malaria programs and our prospective *Aedes aegypti* program are and will be unprecedentedly successful? And why stop there? Think BIG. And we agree. Dr. Solon begs, however, not to be designated an "Expert," adding humorously, "I was not so bad as *that*!" He says incidentally, that though resistance has posed problems in the Caribbean, particularly the genetic DDT-Dieldrin sort, they feel they are well on their way to solving the problem. Bravo!

WHILE WE WERE IN WASHINGTON, D. C. ON WHAT IS KNOWN AS ACTDUTRA (active military duty for "training"), PAT NAKAGAWA flashed back and forth across the country. Collecting his wife, Bettie, who had been at an education conference in Salt Lake City, Pat and son Jodie, who is eight, flew to Detroit, picked up a Mustang and logged 7,000 miles in the next two weeks, taking in Gettysburg, Williamsburg, Jamestown, Washington, D. C., New York and the Fair, Plymouth, Boston, Niagara Falls, Chicago, Rapid City (Mt. Rushmore), Yellowstone, Glacier National Park, Banff, Lake Louise, Vancouver, Victoria, Mt. Rainer, Mt. Hood, Crater National Park and San Francisco! And dinner with DOYLE REED who was just leaving for the London Congress and a wonderful tour of Yurrop. It sounds as if Jody will be the best grounded of any young man in his or any other geography and history class. It's taken *us* well over half a century to make all those places, Pat! (In fact, we haven't seen Yellowstone *yet*.)

AS THE TIME COMES TO INDEX THE PRESENT VOLUME WE ARE ABOUT TO START BEATING THE DRUMS FOR A NEW CRUSADE and we think we might as well start right now. As all Constant Readers well know, we have entered the lists before on these Little Crusades. Such as the Crusade Against Arbo[r]virus as a Word. We still think the word, even without the central *r* gives a misleading mental picture of forests. See also editorial on p. 330 of vol. 18, No. 4 (Dec., 1958). Old Bloody But Unbowed, they call us. We're still on a Constant Crusade against Neologisms, Bowdlerisms and False Derivatives. And words that change in the night. Like *scan* for *skim* (scan means read carefully), *collate* for *collect* (collate means compare carefully with original manuscripts), and even *flammable* for *inflammable*, which we know is a lost cause. Or words like the newly popular *ostensible* for *apparent* or *purported* and the new *radio-sterilized*. (Willie! drop that transistor this instant, you *hear*?)

WELL, OUR NEW CRUSADE IS AGAINST Titles That Tell the Whole Story. Is it really necessary, for instance, to call a paper, "The Use of New Pipette and Assorted Glassware Feeding Techniques in Determining the Transmission Thresholds and Infectivity Rates of a Single Strain of Saudi Arabian Arbovirus in *Aëdes bostrephidon, Anopheles plasmophaegosus, Culex pipiens pipiens pipiens, Uranotaenia ultimaobscurus* and Other Species of Mosquitos and Arthropods Prevalent in or Otherwise Occurring in the Littoral Areas of North Central South America."? (We exaggerate.) (A *little*.)

What we mean is, it's hell on an indexer. Let's leave these four-breath titles to the chemists and go back to ones that can be got on a single line. *With* a page number and a margin. *Please*?

THE VIRGINIA MOSQUITO CONTROL ASSOCIATION'S *SKEETER* reports the formation of a new mosquito abatement district in Hopewell. They must have found some way of abating the fumes from the papermill there, which we always thought were strong enough to keep the mosquitoes groggy. But kidding aside, it surely is impressive the rate at which the Old Dominion is designating new districts to meet its expanding mosquito problems with the explosion of population and the rapid growth of urban areas, freeways and all that goes with "progress." *Skeeter* has some interesting observations on these problems too.

THE TRIENNIAL CONFERENCE OF MILITARY ENTOMOLOGISTS was held during the entire first week of October and uniformed and civilian buggists of all three Services had a happy time renewing old acquaintances and rehashing old problems. Virtually all AMCA'ers themselves, they were addressed (whenever they were not busy with their intra-Service klatches) by other eminent AMCA'ers, including DICK FAY, JOHNNY FALES, RUSS FONTAINE, AUSTIN KERR, E. F. KNIPLING, CARROLL SMITH and DON WEIDHAAS for whom a plane "waited." Eminent but non-AMCA speakers and councillors included Mr. Charles Amyx, Mr. W. W. Dykstra, Mr. Stanley Hall, Mr. R. J. Kowal, and Mr. C. S. Lofgren, and other old friends. The deliberations were held at the Walter Reed Army Institute of Research in Washington, D. C., as central a place geographically as you can find when you're trying to be central to a whole globe. We learned two things . . . it's perfectly legal in the Navy to call the deck a *floor* on a shore station now and the name *fatigans* is beginning to creep back into discussions of a complex that's gotten *too* complex. Hurray!

BOB BARTNETT AND T. O. FULZ STAND OUT

AMONG OUR AMCA MOVEABOUTS THIS TIME by reason of their being Directors of their new assignments. The former is now Robert E. Bartnett, Director, Plaquemines Parish Mosquito Control District, Braithwaite, Louisiana, and the latter is T. O. Fulz, Jr., Director, Chatham County Mosquito Control Commission, 1321 Intermediate Rd., Savannah, Georgia, 31406.

ALSO TO BE CONGRATULATED, SORT OF, IS DR. H. C. CHAPMAN who is like the guy who said, "I survived" when asked what he did in the War. Chappie survived the hurricane (what hurricane could compare to him in energy?) but we haven't heard if his address did. IF it did, it's *Temporary* Bldg. A, McNeese State College, Lake Charles, Louisiana. Then there are DR. BILL FROHNE who has finally made it back to Alaska; Alaska Methodist University, that is, in Anchorage (99501), and DR. BILL HAZELTINE who shook MAD mud (Californian!) from his boots to go head up a swell research project for Chemagro. His address is now 8810 W. 93rd St., Overland Park, Kansas.

AEDES AEGYPTI ERADICATION PROJECT besides luring our abovementioned RUSS FONTAINE, now counts also GEORGE HAYES, JR., who goes from the Phoenix Field Station to an office in the Louisiana State Board of Health in New Orleans, and ELWIN BENNINGTON who goes from Denver to Austin, Texas, 1100 W. 49th St. (78756). Likewise Lt. Col. BOB STAPP, who has left the Army lab. in St. Louis for (is it?) Atlanta.

Other AMCA "movers" include PATRICK THOMPSON, who goes to the Department of Entomology, University of Maryland, in College Park; JOHNNIE COBB, who has skipped overseas and is with the 8th SFG, APO 837, New York; DR. PAUL RICE, who leaves NIH for CDC, Training Branch, in Atlanta, Georgia 30333; RICHARD ROBERTSON, going to the U of Maryland Research Unit, %USAID, APO 271, New York; JOHN SHIPP, who has left Oklahoma for USPHS Environmental Health Lab., P.O. Box 749, Sacramento, California, 95804; LAWRENCE SMITH, JR., who has gone to the Department of Entomology, University of Missouri, Columbia; and DR. ANDREW ROGERS who has jumped across Florida (and up a bit along the coast) to land at 1607 DeWitt St., Panama City.

HAROLD TRAPIDO, the peripatetic Dr. late of Poona and of Oxford, is now of the Rockefeller Foundation office, Apartado Nacional 439, Cali, Colombia; Lt. Col. AL THERRIEN is now warmly ensconsed in the Medical Research and Development work at Fort Totten, Long Island, N. Y., 11359, and CHARLES WARD has skun out of Lubbock, Taixus, to the ivied halls of Cornell; Comstock Hall, that is, Cornell University, Ithaca, N. Y. ART KIDWELL has returned from his USAID assignment and is momentarily back in Baltimore (18), Maryland, at 1300 E. 35th St., JOHN EDMAN has gone *to* the Entomological Research Center, P.O. Box 308, Vero Beach, Florida; H. G. (RUSS) RUSSELL is fourth man on the BuDocks team (we don't mean he's the Anchor Man in Navy talk), with address of 1009 Fairway Dr. N.E., Vienna, Virginia, and DR. WILBUR FRENCH has gone all the way from Riverside to Johannes Gutenberg Universitat, in Mainz, Germany.

AMONG NEW MEMBERS WE WELCOME REGULO HERNANDEZ RODRIGUES, of Monterey, Nuevo Laredo (Mexico), TJEERD DE REUS, of Curacao, and LIONEL PERRY, Gold Coast City, Southport, Queensland, as being most distant, and especially welcome new member DE REUS on account he is a new LIFE MEMBER. Others from near and far, are ALFRED CHIPLEY of Jacksonville, Florida; R. J. HINDERLITER, of Columbus, Indiana; Capt. FRANK DOWELL, of the 5th Epidemiological Flight, APO 74, San Francisco; JOSEPH FOULK, Dept. of Entomology, University of California, Riverside; EDWARD HILL of Houston, Texas; C. C. HAHN, of Orlando, Florida; B. L. HOFFMANN, of the State Department of Health, Austin, Texas; KEITH HARTBERG, of Notre Dame University, Indiana; ARTHUR MORRISS of Baltimore; WENDELL RIDLEHUBER of Waco, Texas; KEITH WAGSTAFF, of Salt Lake City; WALLACE STEFFAN, of the Bernice Bishop Museum in Honolulu; DONALD ELIASON, of the *Aedes aegypti* eradication office in Atlanta; and two Gillespies: BILLY B. GILLESPIE, of 5234 Laurel Canyon Rd., North Hollywood, California,, 91607, and RICHARD W. GILLESPIE, of 445 Cypress Avenue, West Palm Beach, Florida. (They couldn't *get* much further apart!) And not to forget DON MCKAY, of Redington Shores, Florida; JOHN ANDERSON, of New Haven, Connecticut; EUGENE BELLONT, of South Cook County MAD; GEORGE KENT of Temple Terrace, Florida, and A. J. KRELL of Houston, Texas.

GEORGE BURTON HAS ASKED US TO PUT A NOTE in MOSQUITO NEWS CONCERNING THE SPECIFICATIONS OF THE SHELL GAS OIL which was used as a residual larvicide by him in British Guiana against *Culex pipiens fatigans* in pit latrines, as published in his paper, "Attack on the Vector of Filariasis in British Guiana." *Public Health Reports*, 79:137–143, 1964. From 4 to 8 weeks control was obtained with 18 consecutive layers of gas oil on the surface of the latrine contents. "Gas oil is synonymous with high-speed diesel oil, a fuel for diesel engines which operate at over 1200 r.p.m.'s, having a cetane number of minimum 48. Its average analysis is carbon, 85.8%; hydrogen, 13.2%; sulfur, 0.7%; and nitrogen, oxygen and ash combined, 0.3%. It is the portion that distills between the kerosene fraction and the residual fraction of light lubricating oil, with a boiling point range of 180° to 375° C. Its specific gravity at 60° F. is 0.820–0.870, and its flash point is 150." (Personal communication, Shell (Ghana) Ltd.) "We are also using the same gas oil for larvicid-

ing in Ghana, and find that one spraying of three consecutive layers of gas oil with a Hudson X-Pert sprayer having a pressure regulating disc in the nozzle housing, is giving 2 to 4 weeks of control of *Culex pipiens fatigans,* in its usual breeding places."

WE STARTED WITH A MENTION OF OZ BRELAND AND WE'LL CLOSE WITH THE NOTE that among the other remarkable bits of information we have found in his delightful book, "Animal Life and Lore," mentioned by Ye Ed some months ago, is the fact that mosquitoes average 278 to 587 beats of their wings per *second* as compared to hummingbirds, for instance, which only make it at 40 to 50 (*you* try it sometime). Even so, they're beaten out by some midges at 988 to 1047 and maybe that explains why singing midges seem to bother people more than the mosquitoes we're really concerned with in the spring.

REVIEWS AND ABSTRACTS

THE PHYSIOLOGY OF MOSQUITOES. By A. N. Clements. International Series of Monographs on Pure and Applied Biology, Volume 17. Pergamon Press. Oxford, London, New York, Paris. 1963. Pp. ix+393, 6 pl., 22 tables, 90 figs. The only more or less comprehensive works on the physiology of mosquitoes available have been the treatments in Bates' *Natural History of Mosquitoes* and Christophers' *Aedes aegypti,* both of which are quite incomplete, as intended, as well as out of date. The present volume therefore fills a great need, especially for those of us who are not primarily physiologists but who need a comprehensive but easily understood reference work on the subject.

The organization of the book is conventional and logical. The first 11 chapters emphasize physiological processes and the last 5 are on behavioral aspects. There are chapters on embryology, larval physiology, osmoregulation, growth and development, circulation, longevity, nutrition and metabolism of adults, reproduction, sensation, and diapause. The behavioral chapters are on behavior of the immature stages, control of adult activity, flight, host-seeking, and reproductive behavior. There are appended a brief classification of mosquitoes, 41 pages of full references (approximately 900), and author and subject indexes. There are numerous illustrations of good quality and much documentation in the form of tables, although there could be still more.

Dr. Clements' treatment of the subject is skillful and perceptive as well as brief. He has made no attempt to compile the literature but has documented the subject well with a relatively small proportion of the literature which exists. In most cases the references are to the latest papers on the subject, which provide a sufficient introduction for those who wish to seek further. A rough sampling of the bibliography indicates that 60 percent of the references were published since 1954.

There are no obvious omissions in kinds of information reviewed; the coverage appears to be very complete as far as knowledge of mosquitoes is concerned. The book is not intended to be a treatise on insect physiology and should not be judged as such. It is a review and collation of what is known about the physiology of mosquitoes and, to this reviewer, is superbly done. In a work of this magnitude some flaws are inevitable but there appear to be surprisingly few inaccuracies or omissions. The volume will be a welcome addition to the shelves of all who are interested in mosquitoes, and a necessity for culicidologists.—A. Ralph Barr, Bureau of Vector Control, California Department of Public Health.