## **NEWS AND NOTES**

AUSTIN W. MORRILL, JR.

Tommy Mulhern's friends and admirers (a REDUNDANT EXPRESSION!) GATHERED IN SACRA-MENTO TO HONOR HIM . . . AND HIS WIFE HELEN . . . ON HIS RETIREMENT FROM THE BUREAU OF VECTOR CONTROL OF THE STATE DE-PARTMENT OF HEALTH. ALTHOUGH ONLY A SMALL PART OF HIS Real CIRCLE OF FRIENDS AND A., NATURALLY, THERE WAS A LARGE CROWD OF US and we came from all over California, from as near as Davis (DICK BOHART and BOB WASHINO at the University) and as far as JACK KIMBALL from Orange County, and we know you all know where THAT is; Disneyland and all. To start things off, DICK PETERS, who was M.C., did something "just a little different" by presenting 25-year pins to BVC veterans BEN KEH, JACK WALKER, EARL MORTEN-SEN (who, alas, had to be absent), HARVE MAGEE and TOMMY himself . . . who was finishing 26. The accompanying scrolls were signed by the Governor, although a current California joke has it that the economy-minded Gov is sending out things with his name inked in over a scratched-out, printed, Ronald Reagan, Governor.

Tommy's three sons and two daughters-in-law were present and furnished memories of Dad which included their childhood thought that his pictures of field work must be always underexposed because they were always so "foggy," that aquaria were for mosquitoes and Gambusia, not Siamese fighting fish, that the car was always filled with boots and gear (but not for fishing), and that the lunch cloth was often Dad's drawings which always covered the table anyway. Tommy was lauded for being the inventor, perfector and ardent exponent of the nowuniversally-used light trap as well as of the now-universally-recognized value of training and certification. To say nothing of the world-wide assistance he has given WHO and others. Along with all this went a book of letters from those present and absent, which most of us estimate Tommy MAY have time to get around to reading by about 1977 . . . AFTER the next meetings!

After this meeting, we all adjourned to DICK's lovely and spacious house on the American River for drinks, good talk and a stupendous buffet prepared by his gracious and lovely wife. (Yes, we had all been invited.) We, alas, had to leave early, having relatives nearby, but the gathering of good and old friends was something all were reluctant to have come to an end.

Those of you who had visited Dick at "Back Acres" and, like us, are always the last to know things, may wonder how we got to Dick's from Sacramento. Well, it's simple, really. Dick's home is there . . . on the SACRA-MENTO River NEAR the confluence of the American River . . . because Dick is now the Chief of a SECTION in the Department of Health. Has been, since June 1973. The Regional Office remains in Berkeley, under JACK WALKER, in the Department's building on University Avenue. Dick's "new" office is two blocks south of the Capitol Mall, between 4th and 5th Streets, if you want to drop in, as we shall one day and bring you the Full Story.

AMCA's (read Tommy's) NEW NEWS LETTER IS OFF TO A FLYING START WITH NUM-BER I OUT LAST JUNE AND WE HOPE RECEIVED BY ALL OF YOU THE SAME MONTH!. We think it's a tremendous achievement and will be a big gain in intra-AMCA communications. About Meetings, for instance. May we, in this connection, fill you all in on the facts of life a little bit? We DO want to print all your news and notes about meetings in these columns, and we do entreat you to send us a brief write-up of what happened after they're over . . . PUHlease! But we go to press early and at QUARTERLY intervals, you know. So if your meeting . . . or scheduled training course, or whatever . . . is to be BE-FORE our next issue, do send the dope to Tommy for the News Letter. (Better send it anyway! Double exposure never hurts.) And IF it's to be after the next issue, DO send us word before the 15th of the second month preceding. Let us explain. If the meeting is, say, on 6 October and registration is to be limited and must be done before II August, get word to us for the JUNE issue, before 15 APRIL. Now, that seems like a long lead time, but surely you will sort of know what you're preparing for, even that far ahead, these days. If not . . . send it to Tommy as soon as you do know. Unless, of course, like the Mad Hatter's Teaparty, you don't have any room for guests anyway!

WE JUST NOTICED THAT IN THE ACCOUNT OF TOMMY'S RETIREMENT LUNCHEON, we omitted mention of the scroll presented to him by LES BRUMBAUGH in recognition of Tommy's good efforts in the establishment of the San Joaquin MAD which Les has so ably headed for so many years and which many of you have viewed with admiration.

Well, if you feel this is turning into a Tommy edition of n & n, you may be right, but we think he righty deserves it for all he's done for AMCA and is doing and, anyway, he's sent us so many goodies over the years that we just can't refrain from going on and

sharing some of them with you. Frinstance, in 1904 the Commissioner of Police for the City of New York, the Honorable Frank W. Moss, speaking to the Second Annual Convention of the National Mosquito Extermination Society in that city, presented a Criminal Indictment of the Mosquito, in regular indictment form and headed COURT OF JUSTICE WITHOUT MERCY. He denominated in good legal form, as well as scientific accuracy, the counts against Culex, Anopheles and Aedes for the murder of numberless humans through filariasis, malaria and yellow fever (remember, this was 1904) and wound up with a flourish:

"And the Grand Jury further accuse all the defendants of being the enemies of the State, its people and their interests, existing continually in a state of willful lawlessness, doing no single good thing, but ever conspiring for evil, and provoking crime, disease and pestilence, profanity, disorder and riot . . . seizing and holding vast sections of the country and depopulating them of human beings; causing the closing up of dwelling houses, and the shutting out of air, and the prevention of proper ventilation, and the consequent contracting by human beings of the deadly disease known as tuberculosis; committing great cruelties upon man and beast; bringing to naught the enterprise and labor of humanity in many rich and delightful communities; burglariously breaking through all devices for excluding them, and wantonly defying all appliances for destroying them and for ameliorating the sufferings which they produce. . . . " Try that on your constituents! Incidentally, at the FIRST meeting of the above-named A.M.E.S., in 1903, a lawyer named Paul D. Gravath had made the first known proposal that laws should be set up for mosquito control by definite agencies, utilizing the sale of public bonds and of taxes to pay for large-scale drainage, water management and source reduction around dwellings.

HARRY STAGE SENT US A CARD IN APRIL FROM THE 8 WELT-ORCHIDEEN-KONFERENZ (the Germans must be slipping, putting in those hyphens to break up words) held in Frankfurt am Main, where Harry was. It was all part of a three-week jaunt around western Europe and England, orchid and, no doubt, mosquito watching. He said it was still cold, wet and windy, just as we found it in October, but they have no screens in Yurrop . . and you know mosquitoes, especially when, as with orchids, humans tenderly take care to provide them with what they need.

OUR MARGARET SLATER WAS OVER THATAWAY, TOO, AND WE HOPE HAVING A LOVELY TIME, THOUGH WE HAVEN'T HAD MORE THAN A LOVELY CARD. She and her sister were on a cruise on the Orpheus after a stay in London and a hop from there to Venice, where they met the boat. After a cruise of the unreally beautiful Greek Isles...

which doesn't sound right . . . we mean "amid the unreal beauty of the Greek Isles" as the travel folders so lushly put it . . . they flew back to London for another week. We hope she found time for a glass of brew at the British Museum tavern which we thought at first was named "Watney's." (ALL taverns in England seemed to be named Watney's until we found that, my word! . . . the name of the tavern was in little letters, like the "Cross and Feather," under the GREAT BIG WATNEY's.) Anyway, the BM's neighbor is delightful and Margaret steered us there and we hope she had some time for the BM again.

OUR HELEN SOLLERS-RIEDEL WAS OVER THERE, TOO, AND WE HAVEN'T HEARD FROM HER EITHER. HOW ABOUT A small NOTE, HELEN. You DO have friends who'd like to hear. Did you delve into the Brit's book stacks, too?

AND SPEAKING OF FASCINATING TRIPS OF WHICH WE HAVEN'T HEARD THE DETAILS, YE ED . . . not us, Bick . . . attended the Council of Biology Editors in Gainsville and stopped en route in Daytona Beach, where he and we and Helen attended one of AMCA's . . . to us . . more memorable meetings long ago.

JOHNNY MULRENNAN JR. HAS BEEN THE MAN AT THE DISEASE VECTOR ECOLOGY AND CONTROL CENTER AT THE NAVY'S AIR STATION IN ALAMEDA. CALIFORNIA for some time now and continuing their active role in the training of Navy people in mosquito control. They had a big share in the recent flurry of activity in Guam, where the necessarily temporary housing arrangements for the Vietnamese refugees brought concomitant worries about filariasis and malaria transmission as well as other insect-borne diseases. ULV equipment, also largely developed by DVCC, was an important part of the control. Incidentally, JOHNNY is now a full Commander, a welldeserved promotion which arrived with magnificent timing just as he and Mimi took off for a visit to JOHNNY MULRENNAN (Sr.) in Florida. Congratulations all 'round!

THE MANY FRIENDS OF JOE POOLE, AND PARTICU-LARLY THE MILITARY ENTOMOLOGISTS, WILL BE GLAD TO KNOW THAT HE IS ALIVE AND WELL AND LIVING IN DE KALB MISSISSIPI, as he always said he would, some day. Not worried a little bit about mosquitoes or malaria (THAT's all taken care of out of Gulfport) or Okinawa or Bangkok or anything. Though he would like to hear from old friends, especially as he doesn't go much further out of the South than Atlanta, where his married daughter lives. Anyone want to start round-robin letters for keeping in touch amongst all the recent retirees? Joe's address is P.O. Box 57 and DeKalb's is 39328.

WELL, JOHN McLINTOCK CAME THROUGH WITH

A MAGNIFICENT ROUND-UP letter from the Research Station at the University at Saskatoon, Saskatchewan, where interest in mosquitoes has grown apace and particularly with the start of the pipeline in the tundra of the High Arctic... or should we spell it Ar'tic, as all the TV newscasters say it? "In 1968," Dr. John relates, "officers of the Canadian Wildlife Service sent us blood specimens taken from reindeer at Atkinson Point (Lat. 69° 30′ N) about 130 miles northeast of Inuvik, N.W.T. Of 160 reindeer bloods, 8 contained significant titres of neutralizing antibody to the western equine encephalitis (WEE) virus.

"In 1971 our virologist, Dr. A. N. Burton, retired to be succeeded by Dr. J. Iversen who had considerable previous experience with arboviruses in the mixed-wood forest area of Alberta. In 1972 Dr. Iversen turned his attention to the equivalent area in Saskatchewan and demonstrated the presence of California encephalitis (CE) virus in Aedes in Prince Albert National Park (Lat. 53° 55' N) and at St. Walburg (Lat 53° 38' N). In 1973 Dr. Iversen extended his attention to Rankin Inlet (Lat. 62° 49' N) and . . . despite some problems in the transportation of living mosquitoes . . . a virus of the CE group was isolated from four pools of Aedes mosquitoes." (Check THAT on your friendly TV newsroom map next time they zero in on Fairbanks, if your're planning on working on the pipeline. And take your repellent!) He con-tinues, "We are not the only ones interested in mosquitoes and arboviruses north of the 60th parallel. For several years Dr. Don McLean of U.B.C. (British Columbia-Ed.) has been isolating CE virus from Yukon mosquitoes and workers at the Arctic Health Research Center in Fairbanks have been doing the same in Alaska.

Annual Mosquito Abatement Seminars have been held at the University of Manifoba in Winnipeg for some years, now. Winnipeg is the jumping off point for travel to Ft. Churchill and its Arctic Research station, where BRIAN HOCK-ING did so much work and where we (and BILL McDUFFIE before us) did some tests on pre-melt insecticide applications on the snow. These meetings are attended by experts from North America and Europe, many AMCA'ers among them, so we are aware we're reporting nothing new. Still, those who haven't might want to consider it for next time. It's a nice city, too!

THIS YEAR, ACCORDING TO DR. McLINTOCK, who sent us a program, the meeting was held in Edmonton on 25–27 February and took the form of a Mosquito Abatement Symposium and was held under the joint auspices of the Alberta Department of the Environment and the Alberta M.C.A. The symposium was designated a short course for interested graduate stu-

dents at Western Canadian universities and Dr. REINY BRUST was the registrar; this is a facet of instruction which is rapidly gaining favor with university biology instructors and should be given increasing consideration, it seems to us. This program was certainly a university-grade course, with "instructors" like Drs. MARSHALL LAIRD, ROY ELLIS, CHARLES SCHAEFER, J. J. PETERSEN, P. McDONALD, W. L. BIDLING-MAYER and, of course, JOHN McLINTOCK himself. The discussions ranged from supersonics to genetics with stops at habitat identification and control, antibody determinations and public relations. Thank'ee, Dr. McLintock. Maybe it's about time for AMCA to consider meetings (summer!) in Manitoba.

LINO LUNA'S NORTHWEST MOSQUITO ABATEMENT DISTRICT IN RIVERSIDE (Calif.) HOSTED THE SOUTHERN REGIONAL MEETING OF THE SOCIETY OF VECTOR ECOLOGISTS, ON 21 May. Two topics of importance to many MAD's in California, and by extension elsewhere with similar situations, were Mites of Medical Importance, by Dr. Richard B. Loomis (any relation to you, Dr. Ed Loomis? We forgot to ask at Sacramento.) and Pesticide Applicators and the Law, by Dean Jamieson. (This is an advertisement for a sister but not rival Society. If you ain't IN it, look INTO it!)

MEANWHILE IN THE REAL NORTHWEST, THE NORTHWEST M.A.D., WHOSE VECTOR NEWS IS RAPIDLY CATCHING UP WITH VMCA'S SKEETER (and how about putting us back on your mailing list, Skeeter?) reports that the Benton County MAD has recently moved into new quarters that both they and their citizen-constituents can justly be proud of. They added a well-planned 4,000 square feet (total 5,600) and have acquired a helicopter, as well. Congratulations, BRAD ANDERSON!

BILL HAZLETINE, WHOSE ZESTFUL EDGE 18 TOTALLY UNDULLED BY THE PASSAGE OF TIME, HAS TAKEN ON THE EPA IN AN ACTION WHICH MAY WELL BE HISTORIC FOR ALL OF US. He told us about it at Sacramento but perhaps the Oroville (Calif.) Mercury-Register told it better:

"The Butte County Mosquito Abatement District may be involved in a precedent setting case when it goes to court to challenge the Federal Environmental Protection Agency (EPA) in relation to its regulations about the use of DDT.

"Bill Hazletine, Manager of BCMAD, has received direction from his Board to go to court because this is considered to be the only alternative. The matter will be heard in the Federal District Court in Sacramento. Hazletine said that, 'what we are trying to do, is to get the EPA to allow us to use DDT on mosquitoes to protect the public's health.' He thinks his District is the first in California 'to go this way.' It is not sure when the case will be heard in court, because of its complexity." Other accounts in the press have pointed out that Dr. Hazletine is merely bringing to public focus in the case of DDT what has gradually become a widespread consensus on many edicts of the EPA, perhaps sparked by the resentment over the debacle of the catalytic converter which now turns out to be not only expensive but even more environmentally destructive than the previous exhaust emissions. Bill said he is just trying at this point to force the EPA to be consistent, since they say that DDT is OK for health protection and then turn around and ban its use for health protection, then say the ban will shortly be lifted and let things slide for month after month after year. Unsaid, but obvious is the fact that, even though it gets immediately struck from the "record," the fact is bound to come out in the testimonies that EPA has jumped into decisions in knee-jerk reactions on far from conclusive data . . . or even reasonable-doubt data. Well, it'll be interesting, if it ever comes to court. The fight of the Century for sure. David William against Goliath EPA. Any takers?

INASMUCH AS EPA'S BAN ON DDT HAS AFFECTED MANY "DEVELOPING COUNTRIES" THE NATIONAL ACADEMY OF SCIENCES' 1973 report entitled, "Mosquito Control" and sub-titled, "Some Perspectives for Developing Countries," ought to be of interest. With contributions by ERNIE BAY, DAVE PIMENTEL, OUR PREXY CHAPMAN, GEORGE CRAIG, MARSHALL LAIRD, CHARLES SCHAEFER, CLAUDE SCHMIDT, RALPH BARR, KEN KNIGHT, KARAMJIT RAI, and RONALD WARD, it should have been bulletin 7 of AMCA, seems like. It's 3 bucks seventy-five and (we're told) still available.

DAVID TAYLOR AND C. WHITCHER OF THE IN-SECT CONTRAL OFFICE OF YUKON TERRITORY, WC suddenly remembered as we finished the above item, took us to task recently for not giving addresses of places we mentioned as having good publications or reports available, of interest to mosquito controllers. They allowed as how students and newcomers to mosquito control may not KNOW who CMCA and VMCA and all like that are, and maybe they have a point, n'est-ce pas? So, let's see: Brad Anderson's Vector News is published by Locust Grove Press, of West Richland, Washington, no ZIP given, but Brad's Benton County Mosquito Control District is Rt. 1, Box 252-E, West Richland, Washington 99352. Virginia Mosquito Control Association's Skeeter hasn't been sent to us lately and we can't find the back issues, but ROLLIE DORER's is Rm. 209, 401-A Colley Ave., Norfolk, Virginia 23507. The National Academy of Sciences' reports are available from National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22151 and cost \$3.00 except that the one we discussed above is \$3.75 from them and may be free to libraries and foreign Government agencies, so you may want to ask. DON ROHE is Editor of Vector Ecology News Letter, published by JOHN SHANAFELT at 3827 W. Chapman Avenue, Orange, California 92668. The VMCA address is our own DON MURRAY, of course, of Delta Vector Control District at 1737 West Houston Avenue, Visalia, California 93277. We heard address) list planned for this issue or soon, so you won't be utterly helpless for long. Cheersl

LT. COL. MOUFIED MOUSSA'S AND LOUIS RUT-LEDGE'S NEW LABORATORY AT THE NEWLY-ESTAB-LISHED ARMY INSTITUTE OF RESEARCH AT LETTER-MAN HOSPITAL IN THE PRESIDIO OF SAN FRANCISCO turned out to be utterly fantastic in the variety of new and shining equipment and equally shining plans. We came away goggle-eyed. Whoever heard of a COLD plate? We mean just like a hot plate, but COLD. It keeps specimens frozen when you're busy doing virological studies. And the new microscopes. . . ! Where have we been since we retired? Not in THIS world, surely. They haven't quite colonized Phlebotomus yet, but they may be nearing it and they have a machine (for testing attractancy and repellency) for providing blood meals with real blood and artificial skin so exact that it removes all the variables usually inherent in biting studies on volunteers. Well, it may not be new to you erudite types, but it was to us and we found it mighty interesting. You'd be welcome to visit, too. LAIR is behind Letterman Hospital in the Presidio which is served by the 45 bus. Phone first, of

Among the goodies Tommy has sent out LATELY WAS AN EARLY NEWSCLIP WHICH ASKED THE RHETORICAL QUESTION, "Does anybody know of a good use for a mosquito?" in connection with the claim that all God's creatures are here for His uses. Well, by golly, CARL MITCHELL says that UPI reports LEWIS NIELSEN has one and it's one we all "knew" all along but never think about . . . pollination! We'd quote UPI except it's long and besides they keep calling the mosquito "the bug." But Lew's contention is that the male sips only nectar and that in the process of sipping, he inevitably picks up pollen and transfers it in the classic way, thus playing a vital part in the seed development of certain wildflowers. Being the methodical fellow he is, Lew wasn't content like most of us in simply "knowing" this; he went out and made some studies. And found some species of flowers very heavily dependent on the mosquitoes! Even found that the females (which must feed on nectar before they do on blood) play a useful part in all this!!

And someone in the Entomological Society of Queensland . . . and we rather suspect Dr. Elizabeth Marks or Dr. McQueen . . .

THOUGH IT MIGHT BE G. B. MONTEITH, the President, who sent one to Tommy, SOMEONE sent us a copy of their News Bulletin of a year ago, containing a meaty article on arthropodvirus transmission Down Under, by R. L. DOHERTY. His studies zeroed in on Culex annulirostris in the transmission of Murray Valley encephaltis and Dr. Doherty made some highly interesting probes into questions concerning widespread immunological patterns and wildly irregular rainfalls. Incidentally, he made the interesting observation that in early outbreaks and studies in 1917 and 1918, the possibility of mosquito transmission was rejected as "unlikely"!

Toole County (Montana) Mosquito Abate-MENT EFFORTS BY THE EXTENSION SERVICE WERE HAMPERED BY THE EFFECTS OF COLD WEATHER ON Mosquiro Fish but the Merced County (California) MAD had an answer . . . and it works. DOUG WHITE has been air-mailing fish for three years now with great success. About 400 fish are placed in a heavy plastic bag with 11/2 gallons of water. The remaining space in the bag is filled with oxygen. Two of the sealed bags are then placed in an insulated box with coolant and Aw-a-a-a-y they go! DOUG says the fish live fine in this environment for up to 50 hours and the flight to Montana takes only 12 hours and 21 minutes (it must hedge-hop or land for lunch or something, Doug?) et voila! about 1% of the fish die, too.

The Mosquitoes of the Northwestern United States, USDA Tech Bulletin 1447, the definitive work by C. M. GJULLIN and GAINES EDDY issued in 1972, has been re-issued and if you lack one . . . or if your original one is worn out from over-reference, as is likely . . . you can get one from the ARS. In fact, (we haven't checked this, following the old Army rule that 'If you don't ask they don't have to say no,") we suspect that if you write to CARL MITCHELL or BILL ROGOFF, you can get single copies free as long as they last, which may not be long. Carl's address is: Agricultural Extension Division University of California, Davis, California 95616. Bill's: Agricultural Research Service 5544 Air Terminal Drive, Fresno, California 93727.

And in speaking of Bill Hazletine a while back we should have told you that HIS new book, The Legislative History and Meaning of the Federal Insecticide, Fungicide and Rodenticide Act, as amended 1972, a tome of 261 fact-filled pages (some of them humorous, some scandalous) is now available. Write to Bill (Dr. William) Hazletine, 26 Rosita Way, Oroville, California 95965, or the Atlanta Penitentiary, if he loses that suit.

GIL CHALLET SENT US THE "FIRST ANNUAL REPORT" OF HIS ORANGE COUNTY (CALIF.) MAD, which is, as he notes, slightly anomalous as

they've been in there pitching since 1947. The report puts on the record data which demonstrate what we all know, that despite the shift from rural to urban control needs, mosquitoes have been significantly reduced, not to say almost eliminated, in that county. The Report is dedicated to JACK KIMBALL who, GIL reports, is walking three miles a day around Newport Bay and doing a lot of fishing, which he expects to extend throughout California and Mexico with his new camper. We can attest this has all left him looking the pink of health and in the finest of spirits... and looking younger than many of his juniors, at Sacramento, though as we get older we find that EVERYBODY is beginning to look young to us... policemen, Army Colonels, everyone. But Jack looked extra young and bouncy. Good Fishin', Jack!

JOHN STIVERS AND KEN KNIGHT HAVE BEEN "ACCEPTED" INTO THE RECISTRY OF PROFESSIONAL ENTOMOLOGISTS (which makes one remember Shaw's remark about Isadora Duncan's saying she accepted the Universe, "Gad, she'd better!") and LCDR BOB PETERSON and Capt. JOHN W. TAYLOR, JR., who are either already saved or recently "accepted," got nice write-ups in the recent ARPE News. Bob is at the Navy's DVECC at Jacksonville, Florida and John is at Walter Reed, where he is especially interested in data analysis and research on Aedes atlanticus.

THE FOLLOWING ITEMS WERE NOT CLEARED THROUGH THE NEWS AND NOTES EDITOR:

DR ERNEST C. BAY has resigned as Professor and Chairman, Department of Entomology, University of Maryland, College Park to become Superintendent of the Western Washington Research and Extension Center at Puyallup. He has also resigned as Secretary-General, XV International Congress of Entomology. The new secretary-general is Dr. George Anastos.

From a letter from DR. VINCENT C. Mc-CARTHY, Univ. of Md. Medical School:

"You will be interested to know that while we have closed our Brazilian Center, Dr. (Herbert C.) Barnett has remained in Brazil joining the Faculty of the University of Rio de Janeiro. ... Connie Barry (Dr. Cornelius) left two weeks ago to join him."

DR. ROBERT GWADZ has a thriving program in medical entomology at the National Institutes of Health. He is putting a lot of emphasis on the biology of Anopheles species and transmission of various species of Plasmodium. The number of species of mosquitoes being cultured is mind-boggling, and there are large numbers of experimental monkeys and other animals.