

## NEWS AND NOTES

AUSTIN W. MORRILL, JR.

WE THINK PRIDE OF PLACE GOES THIS ISSUE TO DRs. JAMES YOUNG OF SMITH KLINE AND FRENCH IN PHILADELPHIA AND RUTH AND VICTOR NUSSENZWEIG OF NYU who were reported in *American Health* for September to have developed a prototype vaccine against malaria! They are reported to have cloned protein cloaks of the various sorts that make malaria so hard to track and to have then developed anti-proteins which show great promise. It's still cup-and-lip stage, of course, but if we were a sporozoite, we'd be running scared.

AND IN ADDITION TO CLONES, THERE ARE SYMBIONTS AND GENETIC CROSSING AND BACKCROSSING GOING ON AT JOHNS HOPKINS. According to a very thorough article by a Mary Ruth Yoe in the *J.H. Magazine*, MILAN TRPIS has been going after *Toxorhynchites brevipalpis* to make them extra hungry for *Aedes aegypti* and looking into the innards of *Aedes polynesiensis* which has a rickettsia-like symbiont that makes it an extra good host for *Wuchereria bancrofti*. Seems the symbiont, which is transmitted trans-ovarially, has to be there if the microfilaria are to develop into infective larvae. Milan's at the start of a long road, too, but it's no tunnel and he sees a fairly good light at the end of it. He's already got a pure strain of refractory *A. polynesiensis* and would like a good small Pacific tropical isle, as who wouldn't, but he wants it for a nobler purpose.

WITHOUT THE SCIENTIFIC ECLAT OF CLONING AND GENESPLICING, OTHER UNCONVENTIONAL ANSWERS TO MALARIA CONTROL WITHOUT INSECTICIDES KEEP POPPING UP. We ignore hanging garlic about the room (or eating it in quantity) in favor of one recently reported, which was mentioned in a Chinese medieval text more than 2,000 years ago. Trials in China have shown that an extract of sweet or annual wormwood, called *qing hau sau* (QHS) is very effective in controlling malaria in the patient, according to the *Sunday Times* of London. It is reported to be particularly effective against cerebral malaria, which is extra good, if true.

DR. NORM GRATZ HAS CAUGHT US WITH OUR ZEROS DOWN IN OUR REPORT ON HIS TALK AT ATLANTIC CITY. We should have said that he reported that there are 90 million or more new cases of malaria a year (we don't have a good head for figgers and all numbers beyond 10,000 sound alike to us). He points out that many people therefore consider malaria the greatest communicable disease problem in the tropics. The *Sunday Times* article quoted above pointed out that a million children die every year from malaria in Africa alone. And we once thought we had it almost licked.

DON PLETSCHE SENDS US A REPORT ON A TALK GIVEN BY MARSHALL LAIRD AT A JUNE SEMINAR OF THE USDA LAB IN GAINESVILLE: "... an illustrated talk on 'Integrated Control of Mosquitoes on Tuvalu Island' (The Republic of Tuvalu, formerly the Ellice Islands, con-

sists of 9 islands; Funafuti is the capital . . . 9½ square miles). Measures successfully applied to control *Aedes aegypti* in rainwater storage containers included *Altosid* and *Bti*, and mermithids from the Lake Charles, Louisiana, lab. A U.K.-produced carbamate was used for residual spraying. Not only was the integrated program effective against *Ae. aegypti*, the local vector of dengue haemorrhagic fever, but sharply reduced the numbers of pest mosquitoes, to the extent that the sale of pyrethrin mosquito coils suffered a severe decline.

"An interesting observation was the breeding of *Ae. aegypti* within cavities in the trunks of paw-paw and papaya 'trees.'"

MEANWHILE WE HAD A LETTER FROM MARSHALL HIMSELF, BACK AT HOME IN "AWAWARE" his "retirement" villa on Whangaripo Valley Road, in Wellsford, Northland (North Island), New Zealand. (Marshall has invited us all to visit him, you remember, but one had best cable ahead . . . or telephone . . . to make sure he's there, we think.) Marshall says, "The arrival last week of Vol. 1, No. 1 of our renamed journal, by what must have been a rather slow boat, reminds me that I recently came across what appears to be a previously unrecognized field report on *Whopperhinus*. This tracks back to a source that's a byword for veracity, for it is none other than George Washington who assured the author of Weld's *Travels* 'that in one place the mosquitoes were so powerful as to pierce through his boots.' The incident is reported by the Rev. William Kirby and William Spence in Vol. I of their 'An Introduction to Entomology . . .' (1815), with the disparaging suggestion in parentheses, '(Probably they crept within the boots).' It highlights the regrettable lack of vector control, even at the highest levels of command, during the War of Independence; in which the lot of the footsloggers was as always, worse. Thus Kirby and Spence, in their delightful pages (114-122) on the miseries due to mosquitoes, also state that 'Captain Stedman in America, as a proof of the dreadful state to which he and his soldiers were reduced by them, mentions that they were forced to sleep with their heads thrust into holes made in the earth with their bayonets, and their necks wrapped round with their hammocks.' What a marvellous subject for an historical painting on the grand scale, perhaps as a poignant companion-piece to Washington's crossing of the Delaware?"

IN AUGUST THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION ADDRESSED ASPECTS OF THE HYSTERIA ABOUT AIDS WHICH HAVE ALSO ARISEN IN THE PRESS LOCALLY, though in California, at least, so far as we know it didn't produce any additional funding. Dr. Peter Drotman of the CDC in Atlanta was asked about *transmission of AIDS by mosquitoes* and was quoted as saying that there is no evidence to support such a theory, despite extensive surveillance throughout the country. "What is theoretically possible, and what ac-

tually occurs, are two different things," Dr. Bruce Dan, the Editor of the Journal was quoted as adding. We wish people would get hysterical about encephalitis and put their money where their fears are.

THE UNHYSTERICAL *WASHINGTON POST* MADE LITTLE OF THIS BUT GAVE A NICE WRITE-UP TO RICK CRAVEN OF THE PRINCE WILLIAM (Va.) mosquito control program. "During a summer when moviegoers have made a hero out of 'Rambo,'" John Harris of the *Post* staff wrote, "some credit should be given to real-life characters like Rick Craven—a man who also ventures into thick brush and inhospitable swamps to search out and kill the enemy." The *Post* goes on in a lengthy article to describe the workings of the 19-member crew, the largest in Northern Virginia, whose motto is, "What's eating you is bugging us." They do a lot of public information work, exhorting people to seek out the *Culex pip* breeding places in their own and their neighbors' back yards, and for control are relying heavily on *Gambusia* and *Bti*, with chemicals for urban street control and at a minimum, the *Post* also reports, admiringly.

SANDRA KRAFT AND Laurence PINTO ARE "PINTO ASSOCIATES, INC." AND CONSULTANTS and have been in the designing business for counties entering into mosquito control programs. Sandra recently designed and implemented a new urban mosquito control program for Fairfax County, Virginia, which is what would have been the Virginia half of the District of Columbia if the Government hadn't given it back after The War. She found that over a third of the complaints that came in while she was doing this, were from new housing developments, the old city-folks-who-move-to-the-country syndrome. Following this, she wrote an article for *Pest Control Technology* (a spin-off from *Pest Control Magazine*?) last July, a very good and well-illustrated article, we should add.

As we commented a while back, when GLENN STOKES formed his commercial mosquito control company, this has been the way the problem has been addressed in Japan a number of times, when the governmental apparatus was either not adaptable or there was good interest in control in one part and none in another, and it seems to work out very well. We think that this is an area that, in conjunction with MADs, could well be explored. Avanti, Sandy!

ANOTHER FEMININE, THOUGH JUNIOR, ENTOMOLOGIST TO MAKE A MARK RECENTLY, IS REBECCA FORRESTER, a 10th grade student at Heritage Christian School in Florida. Rebecca received first place award in zoology among statewide entries from private and public schools, at the Florida Junior Academy of Science, held at the University of South Florida in Tampa. Her subject was "The Effects of Goat's Milk on Malaria in White Mice," and she was aided and abetted in the selection of her subject by Dr. MARTIN YOUNG. Never laugh at any idea these days. Rebecca is the daughter of Dr. Don Forrester at the University of Florida, according to DON PLETCH, who sent us this.

MATTHEW YATES IS NOW DIRECTOR OF E.B.R. MOSQUITO ABATEMENT AND RODENT CONTROL DISTRICT,

whose address is P.O. Box 1471 and also, if you're there, West 1st St., Ryan Airport, Baton Rouge, Louisiana 70821. CAPT. (Dr.) LANCE SHOLDT finished the 10-month resident course at the Industrial College of the Armed Forces and is now assigned to the Uniformed Services University of the Health Sciences, F. Edward Hebert School of Medicine, in Bethesda, along with LTC DON ROBERTS. Lance is in the Division of Tropical Public Health.

CHUCK HANSEN, WHO IS REGIONAL REP OF THE SOCIETY OF VECTOR ECOLOGISTS IN NORTHERN CALIFORNIA, chaired a mighty interesting, informative and smoothly organized meeting at the State Department of Public Health late this summer. We learned of resistance to mefloquine in Mindanao (Philippines) and Indonesia, from CDR HERB BOLTON of the Navy's DVECC at Alameda NAS, and of the continuing (and increasing) effectiveness of the public education program of Alameda County's increasingly urban mosquito-control from HARRY SCOTT.

DR. GIL OTTO, WHO IS ONE OF THE PHALANX OF FIRST ECHELON "READERS" FOR JOURNAL MANUSCRIPTS, wrote in on the letterhead of the American Heartworm Society, of whose Journal he is Editor. As a non-filariasis specialist, we find this interesting because we didn't even KNOW there was an American Heartworm Society and in view of the increasing awareness of heartworm in dogs and of filariasis in man, we felt there *ought* to be one.

PAMELA STARK, WHO WAS AT THE UNIVERSITY OF ARKANSAS, IS NOW IN TAMPA (Fla.) according to an announcement of Microbial Resources of Theale, Berkshire, England, which makes a brand of *Bti*. She will be testing new formulations in the field use. Perhaps as a partial result of her work at the University, the city of Stuttgart (Arkansas), "Rice and Duck Capital of the World" according to the *Daily Leader*, of that city, has finally organized its first mosquito control program. It is headed by ALLAN INMAN and was established with advice from MAX MEISCH, DAVE DAME and "Dr. JIM WILSON."

"This activity was an outgrowth from some of the research that Max Meisch and the rest of us involved in USDA, CSRS Southern Regional Project S-122 on Riceland Mosquito Management have been conducting over the past 10 years in cooperation with the residents in and around Stuttgart. . . . A group of us gathered in Stuttgart last week (8 July—Ed.) to view the new program and to back up its director, Allan Inman, with some additional assessments of the control tactics Allan is currently using." (Allan had stopped the routine Friday evening aerial spraying in favor of surveillance and topical control.) "It is exciting to see this program finally come to fruition," continues Dr. Wilson, excitedly, "it's been long needed and it's working!!!!" Dr. Wilson of Texas A&M, is JIM OLSON, "under the guise of one of the many aliases afforded me over the years by reporters at the Stuttgart *Daily Leader*."

THE BRITISH MAY GO IN FOR LENGTHY ORGANIZATION NAMES AS MUCH AS WE DO BUT THEY MAKE THEM SOUND COZIER SOMEHOW AND LESS FORMAL. At any rate the British Mosquito Discussion Group and Recording

Scheme, is now the British Mosquito Group, which reports that a suggestion that their group be formalized and a small fee be charged was unanimously rejected. Formalized or not, we want to quote their report, which should interest everyone:

"Keith Snow gave a presentation entitled 'Towards a checklist of British Mosquitoes' which proved to be very enlightening. . . .

"Following Keith's presentation was a potted history of the *Culex quinquefasciatus* versus *Cx. fatigans* controversy by Graham White. The former, American version described by Say (1823) takes historical precedence over the latter name used elsewhere following its description by Wiedemann (1828). Staying with the *pipiens* complex, the current belief is that *Cx. quinquefasciatus* and *pipiens* are separate species found in the tropics and temperate regions respectively, with considerable interbreeding in overlapping areas. Where does this leave *Cx. molestus*, the autogenous non-hibernating, stenogamous mosquito? In a meeting at the Smithsonian Institute (sic) in July 1984, Harbach, Harrison and Gad proposed that *molestus* is a form of *pipiens*, but that the name should be retained as it was useful to summarize the characters.

"Graham then delivered the bombshell that the type specimen of *Cx. pipiens* may actually be *Aedes nigripes* (see Harbach, White and Dahl, Proc. Wash. Entomol. Soc. 1985). Some other snippets from Graham were that the original description of *Culex pipiens* by Linnaeus used many details recorded by Reaumur (1738). Indeed, Linnaeus' name, *Cx. pipiens*, covered all known mosquitoes at the time." This reminds us of a meeting of the Washington Ent. Soc. where the speaker of the evening, a noted dipterist, reporting on his visit to Uppsala University, reported that the type specimen of *Musca domestica* WASN'T *Musca domestica*. He said that he just quietly closed the box and tiptoed away.

THE INTERNATIONAL CONFERENCE ON TROPICAL ENTOMOLOGY is to be held from 31 August to 5 September, 1986, in Nairobi, Kenya, and early registration and further information may be had by addressing Dr. M.F.B. Chaudhury, at P.O. Box 30772, Nairobi, Kenya.

AND THE PACIFIC SCIENCE CONGRESS XVI will be held from 20 through 30 August, 1987, in Seoul, Korea. A substantial number of other scientific societies (but not, we imagine AMCA) have indicated their intention to hold or sponsor meetings concurrent with the Congress. The organizing committee is headed by Professor Choon Ho Park, Secretary General, K.P.O. Box 1008, Seoul 110, Korea, and the Entomology Section is being convened by Professor Chang Whan Kim of the Korean Entomological Institute of Korea University, in Seoul.

THE FLORIDA ANTI-MOSQUITO ASSOCIATION REPORTED VIA RAY PARSONS AND BETH BECK that their 1985 meetings were "unintentionally" profitable (that's bad?). They were held in Sarasota and attended by 198 registrants plus 29 attenders of local

districts. Next year will be Jacksonville, 1987 at Palm Beach, 1988 at the Pensacola Hilton and 1989 in the Orlando area.

DON MCKAY, for whose recent health problems we are mighty sorry, after being a member of AMCA for 21 years has become an Emeritus Member. WALTER BARRETT has been selected to manage the mosquito control program for Fairfax County, beforementioned, which Walter calls "small. . . . about 400 square miles") after managing the program for the Air Forces Headquarters, from which he retired a short while ago. Dr. BRUCE KNUDSEN, with PAHO in Trinidad, has moved to a similar slot with them in Bridgetown, Barbados, West Indies (P.O. Box 508).

In other moves, CPT. JOHN BEIER has left Ain Shaims University in Egypt for WRAIR, in the Department of Immunology, CPT. RALPH HARBACH has left the Smithsonian Walter Reed Biosystematics Unit for the Armed Forces Research Institute of Medical Sciences in Bangkok. (This was the former SEATO lab.) CPT. TERRY KLEIN has completed his PhD under DAVE YOUNG at the University of Florida and will be with the Army's Medical Research Unit in Brasilia. CAPT. TOM LILLIE, who also recently finished his PhD on Ceratopogonids at the U. of Fla., is now at the Air Force's School of Aerospace Medicine at Brooks AFB (San Antonio). CPT. KEN LINTHICUM has left the unit in Kenya to return to the Army's Medical Research Institute of Infectious Diseases at Fort Detrick, Maryland, where he swapped jobs with MAJOR TOM GARGAN (congratulations, Tom!) who goes to Nairobi this month. And CDR STAN HUSTED has shaken BuMed for the Logistics Command, where he will handle protection of foodstuffs and material all over the Pacific, a familiar area for him. We envy his being able to watch its fast development even as we deplore his loss to Our Subject.

AS TOMMY MULHERN MOVES INTO HIS THIRD RETIREMENT WE CAN ONLY HOPE THAT HIS HEALTH PROBLEMS PROVE TO BE SHORT AND ENTIRELY TRANSITORY AND THAT THE MEETINGS HE MISSED IN ATLANTIC CITY MAY BE THE ONLY ONES HE'LL MISS UNTIL AT LEAST AMCA'S 75th. When we first started putting together this column, with a very slim background, though we'd been a member since 1943, it was Tommy who sent us notes from all over the eastern seaboard. When he left New Jersey for California he added on the West to his purview and when he "retired" and took on the AMCA Executive Directorship, despite the additional overwhelming load of work that entailed, he still kept shooting us the items. We'll miss those. But of course, we aren't just mercenary. Over the years, it's been Tommy's warm friendship and the pleasant one-on-one conversations that have counted. These bits of information. The things I never knew til now. The background material. The What is the Why of This Thushness, to quote Artemus Ward, in mosquito control. We learned a lot over the years. We hope to have more conversations and "learning experiences" in years to come.