

NEWS AND NOTES

AUSTIN W. MORRILL, JR.

WE ARE TYPING THIS UP AT THE END OF MAY BECAUSE WE ARE GOING ON ONE LAST BIG TRIP . . . TO ROME, FLORENCE, PAREE AND LONDON . . . AND ALTHOUGH WE HAVE IN THE PAST TYPED UP OUR NOTES ON OR IN MIDWAY, OKINAWA AND THE AUSTRALIAN OUTBACK, we don't quite see ourself doing it along the Champs Elysées. Our French isn't good enough, for one thing, to explain to the cops (les flicks) much more than M'sieu je suis journaliste! So this news and notes will be quite old but it will be good, thanks to all you wonderful folks who responded to our piteous plea and sent in those good, good letters. (Belles lettres.)

MANY OF YOU HAVE NO DOUBT SEEN BY NOW (AS JIM OLSON AND TOMMY MULHERN HAD) THE LENGTHY AND SURPRISINGLY ACCURATE ARTICLE IN THE JUNE ISSUE OF *ATLANTIC* (we hadn't got all the way through the May issue yet) entitled, "Notes of a Mosquito Hunter," written by Michael Lenehan, who isn't an AMCAer but *should* be! He had done his homework very well indeed and he brought out some neglected truths about mosquitoes and mosquito control that are all too often known only to US. (Quel damage.) There is a *genus* (he says), *Malaya*, which "inserts its proboscis into the mouth of the *Cremastogaster* ant and, without hurting the ant in any apparent way, helps itself to the food that the ant has gathered into its crop." OK, you research types! Is the mosquito giving the ant, a) an essential vitamin or digestant virus or salival component, or b) does its saliva just taste good to the ant, or c) is it a cleaning agent or, d) none of the above? Is the ant just too lazy or stupid to bite back or so slow witted it doesn't even know the skeeter is DOING it? Anyway, read the article! (adv.) It has a good many admiring and deservedly respectful references to our DR. GEORGE CRAIG, too, of whom more later.

Heck, why wait? GEORGE CRAIG HAS BEEN ELECTED A MEMBER OF THE NATIONAL ACADEMY OF SCIENCES. This is, we think, the first time that a member of AMCA has been elected to this high honor and we rush to congratulate him—and US.

WE SHOULD HAVE INCLUDED IN OUR ORLANDO MEETING NOTES THAT LTC JOHN REINERT left the position of Research Liaison Officer of the Armed Forces Pest Management Board at the United States Department of Agriculture Research Laboratory on Insects Affecting Man and Animals (breathe) at Gainesville, Florida, after four years, to go to the U.S. Army Medical Research and Development Command at Ft. Detrick, Maryland, COL. MOUFIED MOUSSA replaces him gladly, leaving the important but far from Research position of Entomology Consultant in the Office of the Surgeon General, United States Army, in Washington.

PREXY JIM OLSON APPEARED ON CBS MORNING NEWS IN MAY to answer a few questions about mosquitoes. CBS has been pretty severely criticised for some of their less-than-well-balanced reports and they don't usually go in for much depth (they didn't give Jim a whole whale of a lot of time either) so it was unusually good that this *one* time they went to some-

one who *knew*. Jim says that the reporter who interviewed him, one Diana Sawyer, had boned up by reading the *Atlantic* article, and that was nice, too.

MALARIA PHILATELISTS INTERNATIONAL OF WHICH WE'VE SPOKEN BEFORE had issued their first quarterly report as we wrote this and may still have a copy if you send in your membership now. It contains the first installment of the Handbook/Catalog on stamps around the world, a background story on the 1972 UN FDC which was malaria-related, an article with illustrations on Herm Island's anti-malaria issues and a checklist of Canada's 1962 anti-malaria slogan cancellations. Membership's only five bucks in North America and the address is: 426 W. Fremont, Elmhurst, IL 60126.

ANOTHER GOOD JUNE ISSUE ARTICLE ON MOSQUITOES WAS IN *SMITHSONIAN* with *great* pictures and covering mosquito-borne diseases beginning with LaCrosse virus encephalitis. It's by David Zimmerman and proofed for accuracy by Ye Ed RON WARD and since *Smithsonian* is now practically a mass-media mag (and status symbol) Our Subject is in Very Good Hands indeed.

ALTHOUGH WE THOUGHT DON PLETSCH HAD RETIRED TO GAINESVILLE IT'S REALLY JUST HIS NEW PIED À TERRE (that's French) from which he wrote: "I've just returned from Tapachula, Chiapas, México (along the México-Guatemala border) where I attended the XVIII Congreso de la Sociedad Mexicana de Entomología (April 17–20). Approximately 200 attended. There was an encouraging majority of young entomologists, male and female. However, there has been no change in the tremendous predominance of agricultural over medical entomologists.

"Highlight of the meeting was to visit the US/Mexican plant for production of Medfly (sterile) which is part of the eradication effort going on in the Chiapas area and adjoining Guatemala. By July, 1980, 3 months after having initiated activities, the plant reached its goal of 500 million flies per week." (And lucky for California, too.)

"Mosquito papers at the meeting included one on analysis of wild plants for substances toxic to mosquito larvae. 332 plant species were tested, with 6 showing promise. The best was *Cestrum anagyris* (Sol-anaceae)." (That's a relative of Night Jessamine, you gardeners will remember.) "Garlic not mentioned," Don adds.

"Dr. Cluff Hopla of Oklahoma presented two papers: *Oeciaus vicarrus* (cliff swallow bedbug) and ticks and fleas in swallow nests.

"The apiculture section benefitted from the projection of an excellent film on Africanized bees, filmed with Dr. Taylor of USDA as technical advisor in Venezuela, for West German TV audiences. While impressive, the scenes were no more so than the series of excellent slides which Mel Boreham showed us in Orlando.

"Inasmuch as the Pan American Health Organization has a malaria research team based in Tapachula,

there was a pleasant reunion with the team leader, Dr. Méndez, who was one of the participants in the vector control (meeting) held in 1982 at The Wedge, where Director Ed Smith had an unusually enthusiastic group of 14 trainees from Latin America and the Caribbean."

BILL VISSER WROTE TOMMY MULHERN AND LINDA RAICHE IN MAY to give us news of his doing and a new address: "On my way from Indonesia to Aruba, I passed by my "official address" in Holland and collected the mail. My official address will change as per June first, coming: Office address, Dr. William M. Visser, Kibaima 4 (G.K.M.B.) Aruba, Netherlands Antilles, Tel. 25533. Home address, San Fuego 61 (Santa Cruz), Aruba, N.A., Tel. 20666.

"From the beginning of 1984, I am nominated professor and project leader of the HASANUDIN UNIVERSITY's epidemiological department (Med Fac) in Udjang Pandang, South Sulawesi, Indonesia." Dr. Visser is in the fortunate but trying position of having the University of Rotterdam, which sponsors Sulawesi, want him there while the University of Groningen, sponsoring the Netherlands Antilles project, want him *there*. He also said that Dr. R. S. PANDAY had phoned to say that his family is fine, which we are all relieved and glad to hear.

DR. BOB ELBEL SENT ONE OF HIS UNIQUE ENTOMOLOGICAL PICTURE POSTCARDS TO YE ED to say that he and GEORGE CRANE had just read proof (on 1-IV-'83) on what they thought was to be their last mosquito-arbovirus paper from western Utah, to appear in the then-next issue of the *Journal of Medical Entomology* but that the Army had indicated plans for another survey this (past) summer, so they were still in business. Notes, Bob?

THE FLORIDA MEDICAL ENTOMOLOGY LABORATORY (VERO BEACH) WILL SPONSOR AN INTERNATIONAL WORKSHOP ON MOSQUITO ECOLOGY during 9-12 January 1984 at the University of Florida's Welaka Research and Education Center, 65 miles SE of Gainesville, according to PHIL LOUNIBOS. For further information . . . and we're sorry this comes so late . . . write to "Mosquito Ecology Workshop, Florida Medical Entomology Laboratory, 200 9th Street SE, Vero Beach, Florida 32962."

DICK AXTELL PASSED ALONG A BIT OF CORRESPONDENCE WITH DR. HALIL KASAP, Head of the Medical Biology Department of the Cukurova Universities: Tip Fakultesi, Medikal Biyoloji Kursusu, in Balcali, Adana, Turkey, (a MN subscriber) who has completed some successful research on the colonization of *Anopheles sacharovi*. Dick visited the University some time back and we may be getting a paper on the research one day soon. Stay tuned.

ONE OF THE BETTER . . . INDEED THE BEST . . . NEWS FROM PANAMA IN A LONG TIME IS THE PUBLICATION OF THE GORGAS MEMORIAL LABORATORY NEWSLETTER, the first issue of which, January 1983, reached us in late spring. The Editor is Dr. ALFONSO ESCAJADILLO and the banner design—very handsome—and art work and layout were by Dr. EUSTORGIO MÉNDEZ. The whole *Newsletter* is very stylishly done with better

offset photo work than we've seen in a long time. But the main thing is the informative but informal articles. For instance, at GML, in conjunction with the USAMED R&D Command, studies are being made on the use of new anti-malarial drugs in the owl monkey, *Aotus trivirgatus* and two compounds with promise against falciparum malaria otherwise drug-resistant, have been identified. Mailing list? Write: The Editor, GML Newsletter, P.O. Box 935, APO Miami 34002.

BILL RAMOSKA SENT ALONG A POEM BY A LADY NAMED ARLINE CLARKE FROM CARMICHAEL, CA WHO WE DON'T KNOW IS, OR ISN'T A MOSQUITO CONTROL TYPE, BUT SHE HAS THE MAKINGS. It's called, "Guess Who?"

It's that scratching time of year
When those thirsty pests appear!
Hanging out in rain-soaked ditches
Giving us abundant itches!
They leave us in a month or so
'Till then we're bit from head to toe!
They're feisty springtime foes—
Dracula's cousins—MOSQUITOES!
To which she might have added:
They leave 'cause, like the Datsun ad,
They're driven . . . by the local MAD.

OHIO VECTOR NEWS IN THEIR APRIL ISSUE WARNED ABOUT THE COMING OF AEDES TRISERIATUS, ANNOUNCED LA CROSSE VIRUS SURVEILLANCE which they are conducting (did conduct) in very earnest. They also conducted a contest for a name for the goo and muck collectable from *triseriatus* breeding sources, collected to determine through hatching of eggs if they actually *are* breeding sites. The contest was won by STU MCAUSLAND and SAM BREELAND with "ovistrate" and "ovigenic substrate," respectively. Very scientific. But we kind of liked the one submitted by someone in LANTDIVNAV-FACENCCOM: "detriseriatus." OVN professed not to know what LANTDIVNAV-FACENCCOM *means!* Or even if there is any such thing! Why, it means Atlantic Division, Naval Facilities Engineering Command, of course. Everybody knows THAT!

VMCA MEANWHILE, PREPARING FOR *THEIR* ONSLAUGHT, RECEIVED EPA'S blessing to issue a supplemental labelling for Abate briquettes, together with mixing directions, for use in catch basins, storm drains, pot holes, and other permanent potential mosquito breeding sites. (WE WISH they could put some in OUR potholes in San Francisco city streets! fill 'em up!)

CMCA, NOT TO BE OUTDONE AND IN VIEW OF THE WINTER'S UNUSUALLY HEAVY RAINS AND SNOWS, issued through its Biological Committee's *Biobriefs* a whole textbook load of information on annual mosquito fish. The bottom line, however, is that they are not presently approved for introduction in the U.S. A fly in every ointment.

TOMMY MULHERN DISCUSSING IPM IN CONNECTION WITH MOSQUITO CONTROL IN HIS PAPER ON THE ENTOMOLOGIST AND MC, COUNTERED THIS TREND TOWARD THE EXOTIC by reminding us that while we wait for the new to arrive, we might well remember the methods of old, some of which were quite effective.

tive, though primitive, and might just work still. Just as the Brooklyn Bridge was made by *hand*, our confrères wiped out *gambiae* in South America with Paris green and road dust cast by hand, in large part. He thinks an entomology degree is nice but is shown by many of our best managers to be obviously not essential, while it is essential to remember that an essential ingredient in EPM is flexible thinking.

SO, HEY, YOU GUYS!! SUMMER'S OVER AND YOU DID SOMETHING! Let's have a few Operational Notes. What you did that worked, even if it was unconventional . . . or that DIDN'T work but seems like a bright idea and might be made to work with another approach. Or a bit of bailing-wire machinery that is absolutely transcendental. The cold-fog ULV idea was just that once . . . only an idea.

IN OUR MENTION OF BOB ELBEL EARLIER UP THERE, WE SHOULD HAVE NOTED that the Appointments Advisory Committee of the Department of Biology at the University of Utah voted unanimously last spring to appoint Bob as Research Professor (full). Bob *did* get to the Bishop Museum though, as we'd suggested he would in 1980 or so. He was there a year ago June and July and expects to keep up the visits because of the *quantities* of material to be identified, Mallophaga and such. When he finishes the mountains of New Guinea material, he'll take on the Philippines and Taiwan without drawing a breath. Which means he'll be Research Associate at the Bishop for quite some time, too.

STILL IN UTAH, STEVE ROMNEY REMINDS US OF THE UTAH MOSQUITO ABATEMENT ASSOCIATION'S Annual Meeting, to be held 2, 3 and 4 October in the Eccles Conference Center of Utah State University in Logan. If you've been there, you know what a beautiful place Logan is, especially in October, and if you've been to a UMCA meeting, you know it'll be good. September will be far too late to submit any paper titles to Dr. Romney but (we hope) not too late to plan on going.

IVAN MCDANIEL WROTE AN INTERESTING NOTE: "Recent research has linked some human neoplasms (cancers) to oncogenic viruses. For some time, I have felt that mosquitoes and other biting insects might well be vectors of cancer causing viruses. Nearly 20 years ago my wife and I demonstrated that Rous sarcoma virus could persist in and be transmitted by mosquitoes. It seems we need more work along this line at the present time." His wife has been very ill and we know everyone joins in wishing them both better health and that she may now be in total remission.

CHARLIE COVELL HAS BEEN ELECTED PRESIDENT OF THE LEPIDOPTERISTS' SOCIETY A GROUP MORE HOT-EYED AND MORE NUMEROUS THAN EVEN MOSQUITO TYPES. Besides being professor of entomology, curator of the insect collection of the University of Louisville, Asst. Chairman of the Department of Biology and Acting Chairman of the Division of Natural Sciences, Charlie belongs to so many other scientific

societies (and is ACTIVE in them) we can't list them all and is Research Associate with the Florida Collection of Arthropods.

BRUCE ELDRIDGE, WHO RETIRED FROM THE ARMY IN 1977 AND IS NOW CHAIRMAN OF THE DEPARTMENT OF ENTOMOLOGY AT OREGON STATE, says he seems to spend a lot of time strapped to a chair and working on a pile of papers that grows faster than he can throw it into the Out Basket marked, "For Smith," but he and BOB WASHING have managed to obtain a support grant from Abbott Laboratories and the U.S. Forest Service to study the use of *Bti* in high-use recreational areas in the Sierra and the Cascades. Writing in April he said now if the snow will just melt, they could get to work. But in May the snow DID melt and the mud may have narrowed down the areas needing *Bti* a bit, we'd guess, at least in the Sierra. We hope that by July (in the future as we write this) the mud too will have gone and the research been able to proceed. Let's hear about it, Bruce.

YOU MAY HAVE SEEN THE REPORTS ABOUT THE DENGUE OUTBREAKS IN PUERTO RICO LAST YEAR. The CDC was concerned about it this year, too, because the transmission of dengue 4 is presently largely "silent" and it is during such periods, in the absence of recognition by many doctors, that new serotypes can be introduced without detection. The illnesses in 1982 were generally mild, except for one fatality of a 15 year old male who had what seemed to be a viral encephalitis, although virus was isolated only from the serum and not from spinal fluid or brain tissue. This is said by CDC to be compatible with virologically confirmed dengue encephalopathy described in Asia. They are hoping for intensified virologic surveillance as a means of detecting viruses before epidemic transmission can begin.

IN APRIL WE RECEIVED LETTERS FROM BOTH TOMMY MULHERN AND STU MCAUSLAND BUT WE REFUSE TO BE DICTATED TO BY A MACHINE. They're both so pepped up over their computers, they're nearly insufferable . . . especially to someone who hasn't got a TRS 80 and printer, or whatever! Stu is printing out his *Mosquito Bytes* that way . . . his title is the only clever use we've heard of that crazy word . . . and you may want to get in on the pipeline. Tommy has one of his own at home (gosh, we hate people who flaunt their wealth) and he can use his "modem" whatever THAT is, to connect up with the A.M.C.A. model 16, which prints letter quality and not the little dots of the daisy wheel. Overlooking the fact that Tommy WORKS AT HOME (we bet he's first on the block to mow his lawn, too), it surely sounds wonderful and New World. He hopes to be able, for instance, in addition to putting the office stuff on disc to catalogue all those thousands of pictures he's so indefatigably taken at meetings and all, which are yearly gaining in historical value. As the present recedes inexorably into the past, the early workers and mentors in mosquito control tend to be put into the inactive file of our memories (no cracks!) and Tommy's pictures and biographical notes have inestimable importance, don't they?

Mosquito Bites, for the present, is attached to *Sheeler*, VMCA's breezy newsletter. Stu foresees the time (soon) when he and Tommy can exchange info by telephone, one modem to another. He says the phone call would cost more than postage right now but he wants to do it anyway. That's dedication. (Stu's brother is with IBM, so it may be contagion.) He's also dedicated to his job as Regional Director but like others we know has trouble with feedback, so if he's written to any of you *for goodness sake* ANSWER HIM!

UTAH MOSQUITO ABATEMENT ASSOCIATION'S NEWSLETTER, *The Sting*, pointed out last spring, when flooding caused widespread interest in mosquitoes, for once, that Gillett, in his book, estimated that ten to thirty percent of a mosquito population dies every 24 hours. While adult mosquitoes have been kept alive for more than five months in laboratories, they rarely die of old age in the field. *The Sting* continues, "Thus a million mosquitoes will be reduced to not more than a thousand after one month and hardly any of these will persist another month. This is particularly true of *Aedes* mosquitoes whose adults rarely persist longer than three weeks although a few may survive as long as 6-8 weeks." That reduction depends on no renewal of the population, though, doesn't it? And that's where we come in.

UTAH INCIDENTALLY BY MEANS OF BETTINA ROSAY AND GLEN COLLETT PUT OUT A MIGHTY HANDSOME PROCEEDINGS OF THE UMAA meetings *last* October. We had some fancy things to say about meeting in those lovely snowy surroundings at Alta, where even the parking lot was pretty (they were sort of snowbound) but they did some useful work, too.

NEW ORLEANS MOSQUITO CONTROL SUBTITLED THEIR ANNUAL REPORT "New Horizons for Integrated Pest Management: Biological Control of Mosquito Larvae," and has some very cogent observations on the use of *Toxorhynchites* in the control of *Aedes aegypti*. They got 30 to 40% reductions of prey populations during one study period. They also point out that because *Toxorhynchites* eggs are hydrophobic, they tend to be easily knocked out of "open" containers if disturbed by rainfall. On the other hand, in tires, protected from this circumstance, they did very well.

SOUTH COOK COUNTY CAME UP WITH WHAT MUST SURELY BE THE WORLD'S RECORD FOR SHORT ANNUAL REPORTS . . . a succinct folio, making up to two pages of text, a foreword and a cover. Meaty, though. In an area of responsibility ranging from Very Urban to Watery Rural, KHIAN LIEM's men made over 91,000 inspections of over 12,000 potential breeding sites, spot treated over 21,000 areas and over 25,000 residential area storm drains and again had a reduction in the number of calls for help. And all on *two* pages!

MARSHALL LAIRD'S FIRST REPORT, PROMISED IN JUNE, NEVER ARRIVED . . . HE THINKS IT'S THE CANADIAN POSTAL "SERVICE," WE THINK IT'S OURS . . . BUT JUST AS WE CLOSED UP SHOP ON THIS ISSUE THE FOLLOWING CAME, HURRAH: Phase 3 of the Tuvalu project (Memorial University of Newfoundland) went off well, as

MARSHALL reported at Lake Buena Vista of happy memory. With his Research Associate, JOSEPH MOKRY, he spent the rainier part of Tuvalu's 1983 on the atoll of Funafuti (for those of you with "short" memories, the independent Pacific state of Tuvalu was formerly known as The Ellice Islands . . . nine tiny atolls, about three hours' flight by mini-plane north of Suva, Fiji, and south of Tarawa, which rings a bell for us older types.

This project was funded by the International Development Research Centre (the last word spelled like that because as Marshall informs us, "*Noah Webster* had a monumental spelling problem)." It was sponsored by the South Pacific Commission) and it was conceived to capitalize upon the appropriateness of isolated atolls for innovative work concerning integrated vector control methodologies. The latter phrase has been much used over the past decade and more, but Marshall and Joe, with good Polynesian friends and accomplices and the appreciated assistance of Dr. John Goose of England's FBC (manufacturers of the residual carbamate, Ficom W[®]), have recently completed a major such project on Funafuti against *Aedes aegypti*, which locally (and in many other countries of the tropical South Pacific and Southeast Asia) is the vector of dengue haemorrhagic fever. The team has employed a complete *aegypti*-suppression package, based upon a sustained source-reduction effort that involved the preparation of public relations documentation in the Tuvalu dialect of the Polynesian language (copies of which are available, to anyone interested from Joe or Marshall c/o RUVF, Memorial University of Newfoundland, St. John's, Nfld, Canada A1C 5S7), and called for total community participation via organized groups from Junior Red Cross youngsters, Sunbeams (=Brownies), Girl Guides, etc. to prisoners from the local jail! "Half a dozen of the latter have been transformed into an effective household spraying team," Marshall continues, . . . "well-grounded in safety requirements fundamental to the proper application of Ficom W as a residual spray. Treatment of Funafuti's 300-plus houses with the latter is aimed at any *Ae. aegypti* still emerging despite comprehensive treatment of the atoll's entire drinking water system and other sources with Teknar[®] liquid formulation (i.e., the Sandoz product based on *Bacillus thuringiensis* var. *israelensis*) and Zoecon's slow-release Altosid[®] briquets and tablets."

"The problem of continuing emergence from cryptic habitats surfaced with the team's discovery of significant *Ae. aegypti* production from papaya treeholes (see MOSQUITO NEWS, March 1983 issue). Bearing in mind, incidentally, the circumtropical abundance of papaya trees near houses, Marshall asks how long has *this* been going on?

"As of mid-February the adult collections, in which *Ae. aegypti* predominated, were down from 60 to 0.5 ♀/house/day. Joe's re-evaluation, ten weeks after the last treatment, brought the cheery news that the adult collections had risen to only just above 4 ♀/house/day, this mainly due to a few soft-hearted residents whose households continued to offer welcome breeding sites to wayward and otherwise homeless mosses. The team feels that a timely anti-immatures round may have nearly extinguished this smoldering

aegypti population before it could blaze into disease-transmission potential (an ounce of prevention . . .).” Such rounds are to be repeated at monthly intervals during 1983, and later in the year the team’s epidemiologist, Dr. Ropati Uili, and Marshall, will return to Funafuti for brief assessment visits.

In February Marshall was also a participant in the XV Pacific Science Congress at Dunedin, New Zealand, where he had organized Symposium 7, from

which a book, “Commerce and the Spread of Harmful Insects,” is to be published by Praeger Scientific, New York. Some of the chapters will concern the continuing spread of *Ae. aegypti* and other mosquitoes in the Pacific. The book is to be dedicated to the late, great Dr. BILL SULLIVAN (father of the *aerosol* bomb), whose USDA successor, Dr. HOLLY HAYES, is an important contributor.

And THAT was worth waiting for, wasn’t it?

MID-ATLANTIC MOSQUITO CONTROL ASSOCIATION

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The 9th Annual Meeting of MAMCA will be held in Charleston, SC, on Feb. 22-24, 1984. MAMCA promotes the advancement of comprehensive mosquito control in the region. Regular dues are \$3.00 per year. Contact Secretary-Treasurer.

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