

NEWS AND NOTES

CALIFORNIA MOSQUITO CONTROL IS BIG BUSINESS. FISCAL YEAR SUMMARY INDICATES MOSQUITO CONTROL BIG BUSINESS. A summary of mosquito control activities during the fiscal year 1947-48 by 19 mosquito control agencies participating in the vector control subvention program confirms the fact that mosquito control in California is a significant program.

During the year over a hundred tons of DDT and DDD were used in larviciding and adulticiding operations. Add to this over 21,000 gallons of oil. Approximately 115,000 man hours and 1,600 airplane hours were consumed in these operations.

Approximately 50 miles of ditches and drains were constructed and nearly a hundred cubic yards of earth were filled in low areas. Over 60 miles of access roads were constructed and nearly 200 miles of ditches and drains were maintained. Approximately 11,250 acres of vegetation were removed. These activities consumed approximately 40,500 man hours.

The entire program involved nearly 480,000 man hours of which approximately 62% were charged to rural operations, 13% to urban operations and 25% to unclassified operations. A percentage breakdown of man hours according to activities follows:

Larviciding, 18.4%; adulticiding, 5.3%; drainage construction and maintenance, 8.4%; entomological inspections and surveys, 30.5%; general supervision and engineering surveys, 11.3%; clerical assistance, 6.3%; public relations, 1.3%; all other operations, 18.5%.

Ten thousand six hundred forty-eight square miles of area received the above control or surveillance and nearly 1,700,000 vehicle miles were traveled.

The above figures pertain to less than half of the mosquito control agencies in California, although over half of the total activities for the State are represented.—*Mosquito Buzz*, Sept. 15, 1948.

New Jersey's loss is Washington's gain! It will not be news to some AMCA members that November 1, 1948, was the date of transfer for Ralph J. Van Derwerker, Superintendent-Engineer, Union County Mosquito Extermination Commission, to the U. S. Public Health Service. His assignment as Senior Sanitary Engineer (Lt.-Col.) in the Pan-American Sanitary Bureau, Washington, D. C., should prove most interesting. He will supervise the Bureau's engineering staff and assist them in projects on sanitation operations in the 22 member nations of the Pan-American Union.

H. L. T.

United States, therefore we submit a few facts about our Brazilian friends.

Dr. A. L. Ayrosa Galvão is a professor in the Dept. of Parasitology, School of Hygiene and Public Health, University of São Paulo, at São Paulo. Last May, he and his wife attended the International Congresses on Tropical Medicine and Malaria, in Washington, D. C. Dr. Galvão presented a paper entitled, "Recent or Contemporaneous Active or Passive Dispersion of Anopheline Species."

Dr. Leonidas M. Deane, of the Special Service of Public Health at Belem, Pará, North Brazil, is engaged in taxonomic and biological studies on anophelines and in malaria control with DDT. He has contributed a review for this issue of *Mosquito News*.

Dr. René Rachou, Chief Entomologist in the National Malaria Service, is making an anopheline survey in the State of Paraná, Southern Brazil.

Dr. Abel Vargas, Chief of Malaria Control, Light and Power Company, State of Rio de Janeiro and São Paulo, is interested especially in malaria control on impounded water.

Dr. Fernando M. de Bustamente, heads a group of physicians in the National Malaria Service, which is making malaria surveys in several states of Brazil. This work is being carried out in areas where DDT house-spraying is planned. The doctors will evaluate the effect of DDT on malaria transmission by making spleen and parasite examinations of school children before the DDT program and every year thereafter.

Doctors Galvão, Deane, Rachou, and Vargas attended the Congresses and submitted their applications to the AMCA last May. Dr. Bustamente, who furnished much of the above information, has been an enthusiastically cooperative member since 1946.

H. L. T.

A note from Ernestine B. Thurman informs us that her husband, D. C. Thurman, is now located at the School of Public Health, University of California, Berkeley. Ernestine, who was formerly employed in CDC in Jacksonville, Florida, concludes, "For the present, I am keeping exceedingly busy with the domestic necessities of making a small apartment comfortable."

H. L. T.

A bold experiment that aims at the complete eradication of the mosquito from the whole of the island of Mauritius, east of Madagascar, in the Indian Ocean, was scheduled to commence in September under the auspices of the Colonial Insecticides Committee of Great Britain. The island has an area of 720 square miles and a population of 425,000. Malaria was first introduced about 1862 and for many years has been

It is always a pleasure to become better acquainted with members from outside the

the principal cause of death in the colony. In 1942 over 3,000 persons died from the disease. The malaria vectors appear to be *Anopheles funestus* Giles and *A. gambiae* Giles and the new insecticides DDT and benzene hexachloride will be used in the attempted eradication.

H. H. S.

In connection with the above note by Harry Stage, we bring the following to your attention:

1. The comprehensive survey on malaria in Mauritius by Sippe and Twining, referred to in Stage's Bibliography in this issue. Also, the excellent review in Trop. Dis. Bull. 45(2):134-135. Feb. 1948.
2. The fact that all 3 malarias are present on the island. *Plasmodium falciparum* and *P. vivax* predominate, while *P. malariae* is responsible for approximately one-quarter of the infections.

H. L. T.

FLY CONTROL WORK CARRIED ON BY CALIFORNIA CONSOLIDATED MAD. John Panzak, the Fowler foreman, is carrying on an extensive cleanup campaign to eradicate fly breeding areas. He has the full cooperation of all city officials, and believes with good publicity can nearly rid Fowler of flies. He still needs a good insecticide to kill the adults.—*Mosquito Buzz*, Aug. 15, 1948.

EDITOR'S LAMENT

Last page, last column
Editor's gettin' mity solemn.
Went to P.O. Found it dry.
Again no contributions! Why?

If you want the BUZZ to buzz
Better start 'em flowin' cuz
God ain't editing the BUZZ
Oh how I wish he wuz!

Mosquito Buzz, Aug. 15, 1948.

Perry Ruth, President of the Virginia Mosquito Control Association and technical advisor of the Norfolk Mosquito Control Commission, is determined to keep the public well-informed on the subject of mosquitoes and mosquito control activities.

The Norfolk Virginian-Pilot of August 26 carried a story of an educational meeting held in the Mosquito Control Commission's field office, where representatives of the Federation of Garden Clubs of Norfolk and vicinity were guests of Mr. Ruth. A picture of Perry and the city's anti-mosquito staff, a group of ten young college men, illustrated the news story.

Under the sub-title of "How to stalk a mosquito," the same paper on September 3 took up the subject of hydraulic fills and reasons for their being such a headache to mosquito control men. The article states: "This year the last four troublesome ones in Norfolk, comprising some

360 acres, have been conquered for the first time, Perry W. Ruth announced yesterday."

Two illustrations accompany this article, one of a "drainage ditch to lessen bites" and one of "big bucket in mosquito fight." The latter shows heavy equipment shoveling its way through a 30-year-old fill.

H. L. T.

Dr. Leonard Jan Chwatt, Medical Entomologist at Lagos, Nigeria, and one of our more recently elected AMCA members, has written a letter which may be of interest, especially to those of us who met him at the International Congresses on Tropical Medicine and Malaria last May. Excerpts from his letter follow:

"I received your letter only a few days ago on my return from the Cameroons where I have been spending some time working on an entomological survey; this was in connection with some extremely interesting work on jungle yellow fever being carried out by the Y. F. R. I." . . . "I would like to say how glad I am to become a member of the American Mosquito Control Association, and how much I look forward to receiving its most interesting and valuable publication." . . . "My short visit to the United States now seems a long way off, but remains nevertheless one of the pleasantest memories of my life. The extreme kindness and generous hospitality shown to me everywhere will not soon be forgotten. I most sincerely hope that this short stay will prove to have been merely introductory and that I shall one day have the opportunity of making a much longer visit, of really 'seeing' America thoroughly." . . .

Dr. Chwatt is at present located at the Yellow Fever Research Institute. He has promised to send an article soon for inclusion in *Mosquito News*.

H. L. T.

PATRON ATTACKED BY MOSQUITO AT "COMMON GLORY." The other night, it was reported that a lady attending the showing of the "Common Glory" was bitten in the middle of her forehead by a mosquito.

The "Common Glory" is an open-air show, and the Williamsburg Mosquito Control Commission has been controlling mosquitoes there for the past two years. This was the first report of a mosquito in the amphitheater. A check revealed that on this particular night just before show-time when normally the area is fogged, it looked so much like rain that the fogging was dispensed with. However, it cleared and the show went on without the benefit of fog.

The "Skeeter"

PARTIAL DRYING OF *Culex* PUPAE. In the March, 1948, number of *Mosquito News*, C. O. Masters describes some unusual experiments carried out in India which seemed to indicate that *Culex fatigans* (*quinquefasciatus*) does not re-

quire a water medium in order to transform from pupa to adult. Over five hundred field collected pupae were brought into the laboratory and placed on moist filter paper. Eighty-three per cent completed their development in less than a week.

In the field the same exposure to air had been observed. Soil conditions at the bottom of a breeding spot would naturally affect the ability of pupae to survive as the water drained off or evaporated. It is apparent that the caking of mud would prevent the escape of many adults.

WM. E. BICKLEY, *The "Skeeter"*

PREFLOODING TREATMENT METHOD EFFECTIVE ON CONSOLIDATED. Letter from Ted Raley, Manager of the Consolidated MAD follows:

"You may be interested in the results we've had here with preflooding treatment. Our success has been so spectacular and so positive, we're ready to go out on a limb recommending this method for *Aedes* control. Yesterday Ed Davis offered one of the operators 5 cents for every larva found in a recently flooded pasture. After very extensive dipping no money changed hands. This same field had been a headache to larvicide and results had never been perfect, a few adults always got away.

"Pretreating work was started in mid-May, in two zones. By early July we felt justified in swinging the entire *Aedes* program to this method. At this time all operators have had ample opportunity to test pretreating in every type of condition and none have reported a failure. Tested under varied field conditions by a large number of persons all agree that it does a good job, saves time and has certainly created confidence in the District employees. You can readily understand the position it put the administrative staff in, we take no excuses for *Aedes* adults in any part of the District accessible to ground equipment. The farmers like it better too, we're doing our work when the fields are dry.

"Most of this work is done with boom sprayers. We're not too satisfied with the one we're using, but it works. Tests are being made with different nozzles, but we're sticking to the short, protected boom. With our present arrangement the spray covers a 30-ft. swath, applying approximately $3\frac{1}{2}$ gallons of 2 1/10% DDD or about $\frac{1}{4}$ of a pound of Technical per acre. Some DDT has been used as well as some gamma BHC. Both work well although all work with the gamma has been at about .05 lbs. to the acre. This stuff looks very, very good.

"All areas treated have held up for one flooding, some for as many as five. Another interesting observation has been that when larvae do appear they are very few in number. I've assumed this comes from a combination of factors, possible egg kill, larva kill and adult kill, both at the time of spraying and from residual action. Several reports have come in that adults have

moved into pretreated fields and then disappeared. Some of these reports have come from reasonably responsible employees.*

"Now that we've taken the pressure off *Aedes* control, we're spending a lot of time trying to develop a fixed dispenser for *Culex* control in permanent ponds. We've had success with casting plaster and concentrate, but it is too soon for final results. Gamma BHC shows the most promise to date. Cesspools, ponds, ditch drops, etc., have been free of larvae for several weeks now, but we're not satisfied yet. I'm hoping for something a little more positive, that is, so much larvicide released in such and such period of time. Our present method works, but we still feel uncertain.

"Keep your fingers crossed and hope with us that next year we can be on top, right from the start. Our biggest problem now is to find enough larvae for the experimental work."

Mosquito Buzz, Aug. 15, 1948

Among the publications called to the attention of the Reviews and Abstracts Department during 1948 were:

"PYRETHRUM POST" 1(1):1-24. July 1948. Anglo French House, 2 Queen Anne's Gate, London S. W. 1, England. This is the first number of the official publication of the Pyrethrum Board of Kenya. According to the Editorial: "The *Pyrethrum Post*, now making its first appearance, is published with the object of spreading information about the use of pyrethrum as an insecticide as widely as possible." . . . "It need hardly be added that the Editor will appreciate news and views from readers who are interested in *Pyrethrum*."

"ACTA TROPICA, Review of Tropical Science and Tropical Medicine, issued in collaboration with eminent Swiss and foreign specialists by R. Geigy, A. Gigon, R. Speiser, and R. Tschudi. Professors at the University of Basle." Inquiries and subscriptions may be addressed to Albert J. Phiebig, Suite 906, 545 Fifth Ave., N. Y. 17, N. Y. "ACTA TROPICA" has been published in Switzerland since 1944. Articles are in English, French, or German; and short summaries in the other 2 languages are provided.

"ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT ANNUAL REPORT 1947." 32 pp., 7 tables, 8 illus. Oakland, California. This is the 17th annual report, and was prepared under the direction of Harold Gray, Engineer and Executive Officer.

"THE DESPLAINES VALLEY MOSQUITO ABATEMENT DISTRICT, TWENTIETH ANNUAL REPORT, 1947." 31 pp., 4 figs, 5 tables. Lyons, Ill. J. Lyell Clarke, Sanitary Engineer, is responsible for this comprehensive report.

"CENTERFIELD" is a monthly news letter published jointly by the Division of Entomology,

*Editor's Note: Why not effective also prior to flooding by rainfall?

Fla., State Board of Health, and CDC Activities, at Jacksonville, Fla. J. A. Mulrennan is Director and Mrs. Nina Branch, Editor. Volume 2, No. 5, May 1948, includes: "Work of the Division of Entomology of the Florida State Board of Health," Mulrennan; "Entomological Surveys of North and West Florida Areas, April and May 1948," Taylor and Thurman; "Residual Spray Program," Ault; and reports from anti-mosquito districts. "The Drafting Board," a news and notes department by O'Shaughnessy, concludes this 36-page contribution.

"DADE COUNTY ANTI-MOSQUITO DISTRICT, 13th ANNUAL REPORT, 1947." Fred H. Stutz, Director. 12 pp. Miami, Fla.

"REPORT OF THE UNION COUNTY MOSQUITO EXTERMINATION COMMISSION FOR 1947." Ralph J. Van Derwerker, Supt.-Eng. and Secretary, 18 pp., 8 illus. Cranford, N. J.

"BOLETIN MEDICO," Departamento Médico, Creole Petroleum Corporation, Apartado 889, Caracas, Venezuela. 1(1):1-103. June 1948. (In Spanish.) This bulletin is a publication of Creole's medical department and is "of professional interest, also for industrialists and sociologists," and "subscriptions are free of charge." The Editorial Board includes Pablo Andúze, an AMCA member.

"NEW JERSEY MOSQUITO DIGEST #2." New Jersey Agric. Expt. Sta., New Brunswick, N. J. 10 pp., mimeo. Oct. 1, 1948. "The material for this Digest has been taken principally from the reports of the several mosquito commissions, and the reports of the various executives presented at the monthly meetings of the Associated Executives of Mosquito Control Work in New Jersey." The Digest opens with the above paragraph and concludes with a "General Comment" by T. D. Mulhern.

"ANOPHELES MOSQUITO ON GUAM." The Hawaii Health Messenger, 8(11):1. May 1948. A note of interest to AMCA members follows in its entirety:

"The discovery of the anopheles mosquito was reported to the Bureau of Mosquito Control recently. According to Dr. David D. Bonnet, Acting Chief of the Bureau, the species found, *Anopheles subpictus* Grassi, is considered a serious vector of malaria only in the Celebes. Surveillance work in the vicinity of airports and the waterfront in Honolulu has been carried on by the Bureau since 1945, and control measures, in the event new mosquitoes are discovered in the Territory, can be instituted immediately."

H. L. T.

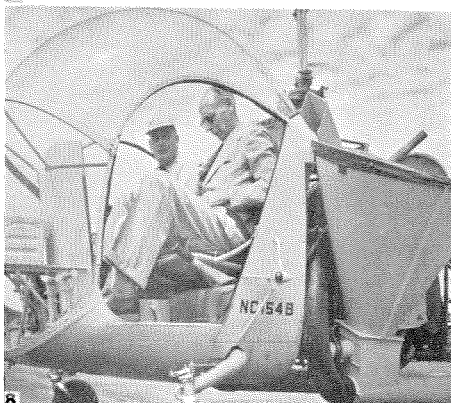
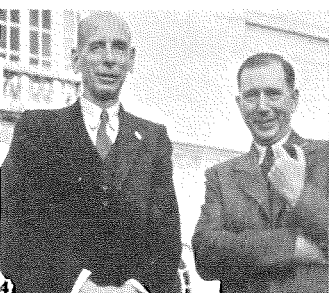
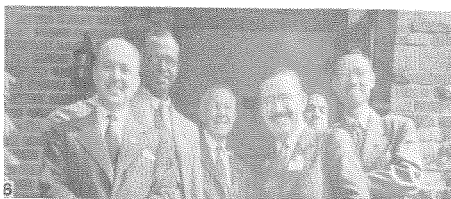
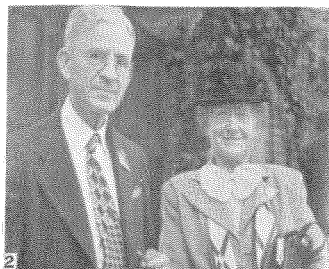
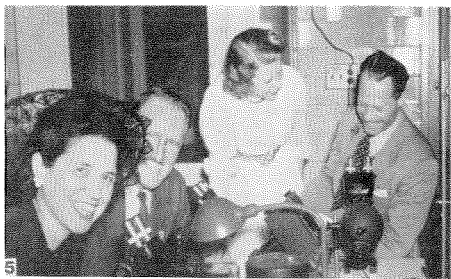
PHOTOGRAPHY OF THE CONGRESSES

A News Note in the September issue of MOSQUITO NEWS described the outstanding events of the Fourth International Congresses on Tropical Medicine and Malaria held last May in Washington, D. C., but failed to mention that cameras

were much in evidence at all times. We are including a few of the photographs taken; the first is a State Department picture by Marie Hansens, and the others, by our own Tommy Mulhern.

H. L. T.

1. Dr. and Mrs. F. C. Bishopp. A candid "shot" taken during the reception at the Pan-American Union, given by Asst. Sec. of State and Mrs. Thorp.
2. Dr. and Mrs. W. B. Herms leave historic Dumbarton Oaks after attending the garden party.
3. Sir Malcolm and Lady Watson pose for T. D. M.
4. Major General Sir Gordon Covell, of the United Kingdom, and Dr. John W. Field, of England and Malaya, oblige the cameraman.
5. Miss Louise Goode (standing) demonstrates the presence of sporozoites in mosquitoes to visitors at the National Institutes of Health, malaria laboratory. Seated are: Mrs. S. Jarchoe (nee Irma Seijo) and Dr. Arthur Turner of the Office of the Surgeon General, U. S. Army; and Dr. Leonard Chwatt, Medical Entomologist, Lagos, Nigeria.
6. Mr. Harry Stage's home in Virginia was the scene of an afternoon party, which included: (left to right) Dr. C. A. Alvarado, Argentine; Dr. K. K. Viswanathan, India; H. H. Stage, U. S. A.; Dr. V. Coll, Argentina; Dr. S. Sundaram, India; and Dr. C. Y. Chow, China.
7. While inspecting the insectary, visitors at the National Institutes of Health, malaria laboratory, observe the preparation of a sporozoite suspension from ground-up mosquitoes. The entomologist explains the process to: (left to right) Dr. A. L. Galvão, Dr. R. Rachou, Dr. L. Deane, Dr. A. Vargas, and Mrs. A. L. Galvão, of Brazil; and Dr. A. J. Walker, United States.
8. Major General Covell goes for a ride in the helicopter during the insect control demonstration at the U. S. Dept. of Agriculture Research Center, Beltsville, Md.



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1. Officers of the Congresses: left to right (sitting), Gen. Marcel Vaucel, Head of Typhus Service, French Colonial Health Service; Dr. Wilbur A. Sawyer, Exec. Sec., Fourth International Congresses, United States; Dr. Leonard A. Schaele, Surg. Gen., U. S. Public Health Service, Chairman, U. S. Delegation; Dr. L. Van Hoof, Inst. Trop. Med., Antwerp, Belgium; (standing), Prof. Alberto Missiroli, Inst. of Health, Italy; Prof. J. Rodhain, Honorary Director, Inst. Trop. Med., Antwerp, Chairman of Belgian Delegation; Maj. Gen. Sir Gordon Covell, Ministry of Health, Chairman of United Kingdom Delegation; Sir Malcolm Watson, London School of Hyg. and Trop. Med., England; Maj. Gen. Sir Sahib Singh Sokhey, Director, Haffkine Inst., India; Dr. Arnoldo Gabaldon, Ministry of Sanitation and Social Welfare, Venezuela.

THE AWARD of the Nobel Prize in Medicine to Dr. Paul Mueller for his discovery of the insecticidal value of DDT is not only a deserved recognition of the scientist and his work but also of entomology and its important place in veterinary and human medicine. Dr. Mueller is to receive the award at a ceremony in Stockholm, Sweden, on December 10. In addition to the signal honor attached to receipt of the Prize, the award has a monetary value of about \$44,000.

Dr. Mueller is known to a number of American scientists both through the appearance of his name as the patentee of DDT, and his visit to this country in 1945 at the invitation of the United States Government along with other members of the Geigy Company with which firm he is connected.

The University of Basle granted the doctorate in chemistry in 1925 to Dr. Mueller who became associated with the Geigy Company immediately thereafter. Practically the whole world feels indebted to Dr. Mueller for the discovery of a material that is doing so much to relieve suffering, mitigate insect annoyance, and step-up production of food, feed and fiber.

F. C. BISHOPP

LOUISE GOODE, our very attractive blonde, has left the insectary at the N. I. H. in Bethesda, Md. She returned to her native South Carolina to begin work, December 6, in the chemical laboratories of the Celanese Corporation at Rock Hill. The AMCA, individually and collectively, will miss her. We wish her the best of luck

H. L. T.

DR. ARTHUR D. JAKES of Lynbrook, Long Island, New York, initiator in 1916, and until last year a member of the Nassau County Mosquito Extermination Commission to which he is still a consultant, has received a signal honor. Proposed by the Nassau County Medical Society, he was nominated by the Medical Society of the State of New York for recognition by the American Medical Association as the year's outstanding general practitioner. Dr. Jakes began the practice of medicine at Lynbrook in 1900; and, in addition to his medical practice and

his service as Mosquito Commissioner, he has been Health Officer for Rockville Centre and East Rockaway; Sanitary Supervisor of Long Island during World War I; Draft Board Consultant during World War II; Staff Member and Consultant of various hospitals; and a member and past president of various medical societies. Outside his profession, he is a Vice President of the Lynbrook National Bank, President of the Rockville Centre Savings and Loan Association, and a participant in many other civic activities.

LIST OF ADVERTISERS

	PAGE
Concession Supply Co.....	V
Essick Manufacturing Co.....	I
Geigy Co., Inc.....	III
Hardie Manufacturing Co.....	II
Insect Wire Screening Bureau.....	VI
Le Hava Air Services.....	V
F. E. Myers & Bro. Co.....	VIII
New Jersey Mosquito Extermination Comm.....	IX
Seacoast Laboratories, Inc.....	VII
D. E. Smith & Co.....	X
Smith Tractor & Equipment Co.....	IV
Todd Shipyards Corp.....	VII
Robert L. Vannote, Inc.....	IX