

NEWS AND NOTES

EPN KILLS LARVAE OF *Culex pipiens*. At a canning factory near Westminster, Maryland a pond which was built to receive waste water provides ideal conditions for the breeding of *Culex pipiens*. Such large numbers of mosquitoes are produced that vast swarms are present in areas adjacent to the pond, and there is evidence to indicate that females fly as far as a mile in search of blood. The pond is heavily polluted with vegetable waste, and no fish are present. Sodium nitrate is added to accelerate decomposition of organic matter.

On August 30, 1955 the pond was treated with 25 percent EPN (Ethyl p. nitrophenyl thionobenzene phosphonate) wettable powder at the rate of about one-third pound per acre. The area of the pond is estimated to be between eight and nine acres, and 3 lbs. of the wettable powder were applied in 125 gallons of water at a pressure of about 200 lbs. Just prior to the application the population averaged 75 larvae per dip. Three hours after spraying there was an average of 0.2 larvae per dip. Enormous numbers of dead larvae were dipped.

Sampling of the larval population nine days after treatment showed an average of three small larvae per dip; after thirteen days there were very few pupae. The conclusion was that the EPN treatment was superior to treatments with DDT applied at the rate of 5 gallons of 30 percent emulsifiable concentrate in 125 gallons of water. The larval population seemed to build up more slowly after the EPN treatment. Furthermore, the treatment was less expensive than an application of DDT.—William E. Bickley.

MOSQUITO CONTROL PROGRESSES! DISTRICT IS APPROVED! ASSOCIATION IS FORMED! Brazoria County, Texas, citizens approved by a vote of more than two-to-one on April 25, 1955, the establishment of a Mosquito Control District in their county, according to information received recently from Mr. Oliver Osborn of the Health and Sanitation Committee of the Brazoria County Chamber of Commerce.

After establishment of the Mosquito Control District, the Brazoria County Commissioners Court planned to appoint a five-man board as governing body of the district. This will consist of one man from each precinct in the district and one member-at-large. It will then be the responsibility of the board to appoint a general manager and an entomologist to co-ordinate and advise the board about the mosquito control program.

In addition, the Gulf Coast Mosquito Control Association has been formed. This group is under the chairmanship of Judge Charles Grooms of Orange County. Membership is composed of the County Judges of Galveston, Jefferson, Chambers, and Brazoria Counties. The group was formed to

establish better methods of obtaining and disseminating technical information on mosquito control and evaluating the possibilities of securing federal aid in conducting mosquito control research in the coastal counties. AMCA members who have assisted in an advisory capacity are Dr. A. W. Lindquist and Dr. F. C. Bishopp.

AMCA congratulates the sponsors of these new groups and hopes that the work will get off to a good start. Invitations to join the AMCA have been extended to these Texans. We shall welcome them to the 1956 meeting in Beaumont.—Ernestine B. Thurman.

WE HAVE HAD MEMBERS FLYING AROUND ALL OVER during these closing months of 1955. Roy F. Fritz has gone as Malariologist Consultant with ICA to the Mexican Government in connection with an ambitious program to eradicate malaria in the Western Hemisphere. This will be a two-year assignment and his address will be USOM Mexico IIAA, % State Department Mail Room, Washington 25, D.C. Roy recently returned from a one month assignment to Liberia. He is now a Senior Sanitary Engineer (Lt. Col.), by the way.

MEANWHILE DON PLETSCH has returned from the WHO Malaria Team in Taiwan and is again domiciled at Route 1 (Idylwood), Falls Church, Virginia. This does not mean that Don is *in* Falls Church. As this is written at least, he is in Mexico City with Roy helping to lay the groundwork of that important project.

DR. FRED BISHOPP also has returned to his old haunts after making a brief detour to California to visit his daughter. He is now living at 8014 Piney Branch Road, Silver Springs, Maryland, and says he is busy on projects of his own, for a change. Nevertheless, Washington mosquito control experts are glad to have him once more closer at hand.

OTHER MEMBERS AND FRIENDS OF MEMBERS NOW VISITING AFIELD include Paul L. Rice, who has taken a leave of absence from Whittier College to become Malaria Project Leader in Addis Ababa, Ethiopia. John E. Lane will be the assistant entomologist there, and Mr. A. E. Najjar, the parasitologist. Dr. Ingco, assistant to Dr. Antonio Ejercito in the Philippines, is in this country at the University of Florida.

ROLLIE DORER SENDS IN A BRIEF DESCRIPTION OF A HANDY LITTLE RIG FOR LIGHT TRAPPERS:

"The Virginia State Health Department's Bureau of Insect and Rodent Control processes and identifies many thousands of mosquitoes each season from the light traps operated in the Tidewater area.

"When a light trap takes a large number of moths and similar insects, it usually happens that when the mosquitoes are separated from the rest of the catch, their legs and bodies are so heavily coated with the powdery scales of the other insects that identification under the microscope is slowed down. In an effort to improve such conditions, this Bureau uses a rather simple 'air bath' that is quite effective. Ordinarily, a 50 cc., large mouth, 'sample bottle' is used but a larger size may be substituted. Through the cork stopper a hole is drilled near one edge with the blade of a small jack knife. The hole is set at a slight angle with the vertical and a glass 'intake' tube is inserted. A second, or 'exit' hole is then bored through the cork stopper and a tiny piece of fine mesh wire screen is cemented over it at the end opening into the bottle.

"Mosquitoes to be identified are placed in the bottle; blowing steadily for perhaps a second through the glass intake tube spins the insects about and cleans them thoroughly without injuring them; while the dust particles pass out the exit hole. The operation has been found to be quick, simple and effective and has been a great saver of time and eye strain in the task of identification.

"Many readers undoubtedly have used the same or similar equipment for this purpose but this is written for the benefit of those possibly inconvenienced by the same conditions and who have not yet got around to remedying them in a simple way.—Submitted by, George R. McPherrin, Bureau of Insect and Rodent Control, Virginia State Health Department."

TED AARONS, who resigned as assistant manager of the Alameda County Mosquito Abatement District at the time Harold Gray retired as manager, has taken over the directorship of the Diabolo Animal Laboratories. This is a Berkeley, California, firm specializing in the development of pedigreed strains of laboratory animals, used principally in cancer research. However, Ted still maintains an active interest in mosquito control, as is indicated by his retaining his membership in the American Mosquito Control Association and the California Mosquito Control Association. He writes that his address is now 290 Livorna Heights Road, Walnut Creek, California, which makes him a neighbor of Helen Louise Durkee.

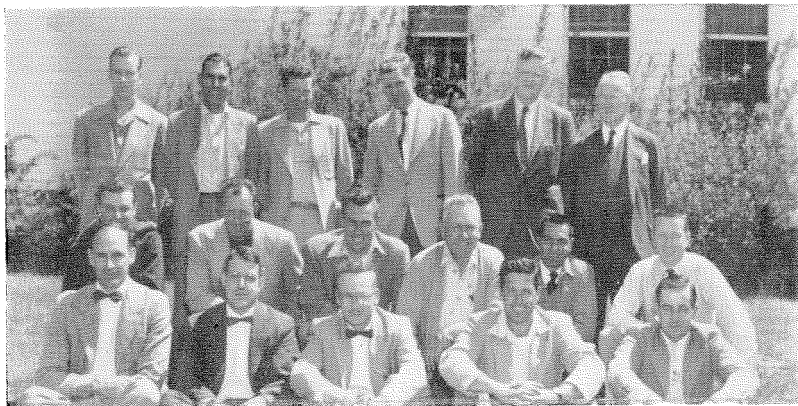
RUSS FONTAINE, OF CALIFORNIA'S STATE DEPARTMENT OF PUBLIC HEALTH, HAS AN ARTICLE IN THAT DEPARTMENT'S EXCELLENT MAGAZINE "VECTOR VIEWS," which is too long for review here but contains so much valuable information that it should be read by all mosquito control men. Appearing in the August issue, Vol. 2, No. 8, the article is entitled, "Relation of California's M.A.D. Programs to the Effects of Pesticide Use Upon Livestock." In it, Russ reviews the history

of insecticides and the ever-intensifying programs in the mosquito abatement districts, and then goes on to say, "Despite these increased hazards, there were no proved incidents of livestock poisoning traceable to M.A.D. operations. In only three instances, two involving livestock and one, geese, was there any doubt concerning M.A.D. operations. . . . In view of a recent statement by Dr. Radeleff, U. S. Department of Agriculture veterinarian at Kerrville, Texas, to the effect that geese are particularly susceptible to Toxaphene poisoning, it is possible that M.A.D. operations may have been directly responsible [for the geese]. . . . In summary it seems evident that while the potential for outbreaks of livestock poisoning resulting from M.A.D. operations appears to be very good, the likelihood of problems arising are fairly remote"

FRED SOPER MADE HEADLINES IN AN ASSOCIATED PRESS DISPATCH WHICH APPEARED IN NEWSPAPERS THROUGHOUT THE COUNTRY. Under the head "Malaria Extinction Cost Put at 100 Million," it appeared in Atlanta, Georgia, papers (where ye Ed. was) as follows: "The eradication of malaria in the Americas over the next four or five years would cost an estimated 100 million dollars, the director of the Pan American Sanitary Bureau estimates. Dr. Fred L. Soper made the statement at the eighth meeting of the bureau's directing council. The organization's 1956 budget calls for only \$100,000 for malaria control." (That wouldn't pay for much TV time, would it? But TV goes on all the time, day and night. Well, so does mosquito control if less expensively. Useful, too.)

AFTER NOTING THE PAPER TO BE PRESENTED AT THE CINCINNATI MEETINGS OF THE ENTOMOLOGICAL SOCIETY OF AMERICA by Dr. Max Day on the subject of myxomatosis in Australia, we find a note on the same disease in the October issue of California *Vector Views*. Among other things the article informs us that "The virus causing myxomatosis in rabbits is almost host specific. It not only will cause no ill effects in other animals, but will not seriously affect rabbits other than *Oryctolagus*. This is the common wild European rabbit. . . . It is the ancestor of all breeds of laboratory and most domestic rabbits." *Vector Views* goes on to remark that of course California rabbits are a different breed but *Views* has to admit that California rabbits can act as a reservoir from which mosquitoes may transmit myxomatosis to domestic rabbits. This makes the disease of interest to mosquito control men, now that self-appointed public benefactors have taken to liberating the disease here, there and everywhere.

TRAINING PROGRAM FOR MOSQUITO CONTROL SPECIALISTS: A training program for supervisors and foremen of mosquito control projects was



Some of the participants in training program at University of Massachusetts.

held from May 9-13 at the University of Massachusetts, Amherst, Massachusetts. This course was sponsored jointly by the Northeastern Mosquito Control Association, the New England Field Training Station (operated by the U. S. Public Health Service and the Massachusetts Department of Public Health) and the University of Massachusetts.

The course was conducted by Dr. H. D. Pratt, Communicable Disease Center, U. S. Public Health Service, Atlanta, Georgia. Mr. Robert Armstrong, Secretary of the Northeastern Mosquito Control Association, coordinated the arrangements for the supervisors of the various projects. Dr. F. R. Shaw was in charge of local arrangements at the University.

The meetings were well supported. The supervisors of the various projects including R. L. Armstrong, Lewis Wells, and Bill Doane not only participated in the program but also made possible the attendance of their foremen. The discussions were intentionally informal and each man was invited to enter into the discussion. As a result there was a free interchange of ideas.

In addition to those already listed, featured speakers included Dr. E. H. Wheeler, William Boyd, Dr. T. J. Andrews, and Dr. Marion Smith. Edward Wright, Chairman of the State Reclamation Board also attended a portion of one morning session.

The program in general consisted of lectures, discussions and films in the morning and laboratory periods in the afternoon. In the laboratory the recognition of both larval and adult mosquitoes was stressed. Demonstrations of the use of various types of equipment, and of the mixing of insecticides were held. One afternoon was spent in a field trip to show the relationship of the mosquito breeding areas to the type of mosquitoes produced.

The entire program was a success. The foremen indicated their satisfaction and expressed the

hope that similar meetings could be held in the future.—Frank Shaw.

WE ARE INDEBTED TO THE VIRGINIA MOSQUITO CONTROL ASSOCIATION'S "SKEETER" FOR SO MUCH INFORMATION THAT IT IS HARD TO CHOOSE THE MORSELS TO REPEAT HERE. However, two small items of equipment described in the August issue seem to be of potential value to all mosquito controllers. In connection with the installation of blinker lights atop fogging trucks and jeeps, which many districts are finding wise, Superintendent Carter of the Virginia Beach Control Commission reports an idea to save these lights from being knocked out of action by the first bough. Superintendent Carter bent two pieces of quarter inch steel bar into arcs which stood higher than the blinker and then fastened them to the cab roof like croquet wickets on each side of the light, pointing fore and aft. By this means he was able to give the light full protection and still not obscure it from any side.

The son of another District Supervisor, young Joe Hughes, working as a light trap collector, noticed that when the catches were heavy the holes in the bottom of the dixie cups used to line the killing jars, seemed to fill up with moths and the kills were not then very good. He suggested that if more holes were made higher on the sides of the cups, the fumes could still get in even if the circulation from the bottom holes were cut off.

Sergeant Panguibitan of the 714 Preventive Medicine Company at Camp Stewart, Georgia, has another solution. He puts a circle of cork in the bottom of the dixie cup and sticks insect pins into it like a pin cushion. This makes an insect "tank-trap" and holds the large beetles and moths up in the air, while the less bulky mosquitoes fall between the pins, are killed and are not rubbed into unrecognizability or broken into indistinguishable masses of parts.

The same issue of the *Skeeter* tells us that

Charlie White of North Carolina, who has been a booster of mosquito control in his state for years, and whose assistance was invaluable to the Army in its control efforts during World War II, has an article on the subject in the May, 1955, issue of the N. C. State Health Bulletin, that is both pertinent and informative.

"Largely through the efforts of Charlie White," *Skeeter* says, "A broad program for control of salt marsh mosquitoes has been undertaken in North Carolina and is now under way. Our own experience tells us that this is a large order, but Charlie is just the man to see it through."

CHESTER ROBINSON OF THE ALAMEDA COUNTY M.A.D. REPORTS THAT HAROLD GRAY visited the new office buildings of his former bailiwick and was the honor guest at the dedication ceremonies for the Earl Warren Hall Public Health Building on the University of California campus. It is good to know that Harold has recovered from his unpleasant illness which threatened to start his retirement-vacation off on a poor gait. Chester also reports the happy news that the District moved into their new offices at 3024 E. 7th Street, Oakland 1, California, (telephone Kellogg 3-7321), and adds that "it is hoped that friends of the District will feel at liberty to visit us here at any time."

WHO'S WHO IN THE AMERICAN MOSQUITO CONTROL ASSOCIATION BRINGS US TO CONSIDERATION OF SEVERAL WHOSE NAMES HAVE BEEN IN *Mosquito News* OF LATE:

WILLIAM E. BECKEL, recently and for the past six years at the Defence Research Northern Laboratory, Ft. Churchill, Canada, was born in Kingston, Ontario and graduated from Queen's University, Kingston, Ontario in 1949.

Bill then spent a year with the Division of Entomology of the Canadian Department of Agriculture, working in Forest Entomology and Systematics. From here he went to the Defence Research Board and has done intensive mosquito research in the virtually arctic tundra regions around Ft. Churchill, on Hudson's Bay. He received a Master's Degree from the University of Iowa in 1952 and a Doctor's from Cornell in 1955. He plans to join the Field Crops Insect Unit of the Dept. of Agric., at Chatham, Ontario, this fall, where he will work on ecology and physiology. We hope this won't mean that he is abandoning mosquitoes and us. He lists his hobbies as "gracious living" a desire undoubtedly intensified by the rigors of his arctic living. (Those who have seen the very plush Club at Ft. Churchill will know what we mean.)

RICHARD M. BOHART, whose definitive work in the Pacific during the Second World War has made him an authority familiar to many, was born in 1913 in Palo Alto, California. In spite of this handicap, he graduated from the University of California in Berkeley in 1934, received his

MS there in 1935 and went on to earn a PhD in 1938. He was an instructor at the same University and is now an associate professor at the Davis campus. His work, above mentioned, in the Pacific was done under the aegis of the Medical Service of the Navy, which he left with the rank of Lieutenant Commander. His hobbies are insect collecting, a rewarding and not too difficult hobby in California, and painting, another urge which is easy to stimulate and to satisfy in the Golden State.

WILLIAM C. FROHNE, who has sent us several observations on mermithid parasites, is currently at the Arctic Health Research Center of the U.S.P.H.S. in Anchorage, Alaska. He says his early training was really in Limnology but that Dr. Louis Williams proselyted him to mosquito work in Savannah by introducing him to the marvels of anopheline larval ecology. Working in malariology at Salonika, Greece, he developed a colony of *Anopheles superpictus* which was used by laboratories in Athens and Rome and by the Wellcome Laboratory in England. Bill says he is promising himself and threatening his wife with a tour in the tropics next, when their three teen-age boys are in college.

DONALD J. PLETSCH was born in 1912 in Lake City, Minnesota and graduated *cum laude* in 1932 from Hamline University in St. Paul. His MS and PhD degrees followed in 1936 and 1942 from the University of Minnesota and meantime he had commenced his teaching and research career in Montana State College and the Montana Agricultural Experiment Station in Bozeman. On April 1, 1943, he found himself entered into the Army of the United States, and Uncle Sam wasn't fooling. As Commanding Officer and Entomologist of the 218 Malaria Survey Detachment, Don saw duty in Camp Grant, Camp Plauche and then overseas in New Caledonia, Leyte and Hokkaido, Japan. His athletic ability and zest for life stood him in good stead in the years after the war when he went all over Japan preaching insect control for SCAP, MacArthur's Scientific and Technical Division. After a short tour in Washington, D. C., he went to Taiwan (Formosa) to direct the malaria control being done by W.H.O. on that Island. *O-kaerimashita, Don! Irrashai!*

ERNESTINE THURMAN was born in 1920 (which is so recent that we're sure she won't mind our telling it) in Atkins, Arkansas and graduated from the College of the Ozarks in 1943. In 1944 she was at Tulane University in New Orleans working in culicidology, from which she went to the Malaria Control in War Areas organization of the USPHS at Jacksonville, Florida. In 1948 she and Deed C. Thurman were married and later that year were assigned to the California Bureau of Vector Control in Berkeley. From there they

went to the National Institutes of Health in Bethesda, Maryland, and in 1951, commissioned now as a Senior Assistant Sanitarian, and with the diplomatic rank of Attaché, she accompanied her husband to Chiangmai, Thailand. Their joint efforts resulted in a highly successful completion of their mission, which was, however, tragically terminated, as AMCA members will recall, by the death of her husband, Lt. Commander Thurman. Ernestine returned to Washington where she heroically carried on the finale of their joint work and has since proceeded earnestly and successfully with her research work for the Division of International Health and the Thai Mission, at the U. S. National Museum. Ernestine is a member of the Commissioned Officers Association of the PHS, the Siam Society, the Entomological Society of America, the Florida and

California Mosquito Control Associations, and American Public Health Association, the American Society of Professional Biologists, the American Society of Parasitology, and others. With her young daughter and son, she lives presently in Washington, D. C. and is assigned by N.I.H. at the University of Maryland, nearby.

ALL THE KIND, GENEROUS AND LOYAL MEMBERS OF A.M.C.A. who have been sending in items for "News and Notes," are urged not to stop now, but to continue sending them in to the new address of the News and Notes Editor, which will henceforth be: Austin W. Morrill, DD-111, District Public Works Office, Headquarters 12th Naval District, San Bruno, California. (And that's the reason for all those polite remarks we've been making about California.)

OBITUARY

As this issue of *Mosquito News* was going to press, we received news of the death of Bill Komp on December 7.

Born in Yokohama, Japan, he returned to this country and studied at Rutgers University, where he received his B.S. in 1916 and his M.S. in 1917. After being a fellow at Cornell University for a year, he joined the U. S. Public Health Service. Among his assignments with the Public Health Service was his work at the Gorgas Memorial Laboratory in Panama. He was also a traveling representative of the Pan American Sanitary Bureau and a member of the Institute of Inter-American Affairs.

He was a member of a number of professional societies, including the American Association for the Advancement of Science, the American Mosquito Control Association, the Society of Tropical Medicine, the Entomological Society of Washington, the Washington Academy of Medicine, the Entomological Society of America, and the Sociedad Venezolano de Ciencias Naturales.

(The above information was furnished by Austin Morrill who had submitted it as part of one of his "Who's Who" sketches for this number of *Mosquito News*. It comes as a shock to all of us that we are having to write, instead, an obituary.)