

OBITUARIES

FRED L. SOPER

Dr. Fred L. Soper, internationally known for his work in the control of arthropod-borne disease, and especially a mentor to mosquito control workers for his leadership in the control of yellow fever and malaria, died at the age of 83 on February 9, 1977, in Wichita, Kansas, following a long illness. He had moved to Wichita last fall from Chevy Chase, Maryland, where he had resided for 30 years. He was a native of Hutchinson, Kansas.

Dr. Soper received his bachelor's and master's degrees at the University of Kansas, a medical degree at the Rush Medical College of the University of Chicago and a doctorate in public health at Johns Hopkins. After an internship at Cook County Hospital in Chicago, Dr. Soper joined the staff of the Rockefeller Foundation in 1920 and soon went to Brazil, where he worked until 1942, with the exception of 3 years, which he spent in Paraguay.

When Naples fell to the Allies in 1943, he was one of the leaders in the efforts which halted the spread of an epidemic of typhus there and later elsewhere in Italy. As civilian member of the United States Typhus Commission and as head of the Rockefeller Foundation's war-time typhus team, he took part in the continuing program to control body lice by means of DDT, a then-new insecticide, in Egypt and

Algeria, and subsequently to halt incipient typhus epidemics throughout Europe. As the war moved to the Pacific and the problem of malaria became increasingly prominent, his advice and expertise as well as the power of his recognized leadership in disease vector control to command attention, were of inestimable assistance to workers in mosquito control both in the military and in the Public Health Service's arm, then called Malaria Control in War Areas.

In 1947 Dr. Soper was elected director of the Pan American Sanitary Bureau, which became the PAHO and a regional office of WHO. After his retirement in 1959 he continued to serve as a government consultant on public health problems.

In 1946, Dr. Soper had received the Lasker Award of the A.P.H.A. at its first annual presentation. He was also the recipient of the Grand Cross of the Brazilian Order of Merit, which was presented on his 80th birthday, as well as many other citations throughout his career. He was a former member of AMCA.

He is survived by a sister and three brothers. His wife, the former Juliet Snider, died in 1968.—Austin W. Morrill, Jr.

COMMENTS ON THE ACCOMPLISHMENTS OF
FRED L. SOPER

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Among Dr. Fred L. Soper's outstanding accomplishments in the realm of international public health are 4 projects involving 3 species of mosquitoes: *Aedes aegypti*, *Anopheles gambiae* and *Haemagogus spegazzinii*.

The first of these was the step-by-step development in Brazil of a technology for the eradication of *Aedes aegypti* from that country, and later from almost all of South America. Regrettably, there have been serious reinfestations of the eradicated area.

The second accomplishment was the demonstration that yellow fever could, and did, occur in rural areas in Brazil that were completely free of *aegypti*. The phe-

nomenon was first discovered in 1932 in the coastal state of Espirito Santo, and is now known as jungle yellow fever.

The mosquito vector of the new epidemiological type of yellow fever—several species of the genus *Haemagogus*—is a tree-hole breeder. No measures exist for its control. It is now well established that jungle yellow fever is endemic in the vast tropical rain forests of South America. It is also endemic in the tropical rain forests of Central Africa, with feral species of *Stegomyia* the vectors.

The third mosquito that Dr. Soper attacked was