

ing to other insects of medical importance. Impressive evidence of his library research is found in a valuable set of reference works of worldwide coverage on fleas, mites, and ticks of public health significance. With a volume for each continent, "Arthropods of Medical Importance" brings together essential data on the biology, seasonality, geographic distribution, and ecology (including disease organisms transmitted) of each pest species and cites the original sources for these data. This huge compilation was prepared over a period of 14 years by a multilingual group of more than 40 persons from eight countries, working under Professor Travis' direction.

Duties off the Cornell campus also demanded his time and attention. He was

assigned by Cornell to the University of the Philippines for a two-year stint (1957-59), with a three-month term in 1963 to help plan a graduate school facility in animal sciences. On his only sabbatical leave (1968-69), he did field research on the biology of black flies in Costa Rica. He had been a member of the advisory committee of Gorgas Memorial Laboratory (Panama), the U. S. Quartermaster Technical Committee on Repellents and Insect Control, and a grants committee of the National Institutes of Health.

Contributions in memory of Professor Travis can be made to the John Henry Comstock Memorial Library, Department of Entomology, at Cornell.

—E. W. Cupp with the assistance of the Cornell University Public Relations Dept.

## WILLIAM CARRINGTON FROHNE 1908-1980

William C. Frohne was born in Nyack, New York, July 23, 1908. He received the B. A., M. A., and Ph.D. degrees from the University of Michigan and also studied at the University of Tubingen as an exchange student and at Cornell University. He worked as an aquatic biologist in Missouri prior to joining the U. S. Public Health Service Commissioned Corps in 1942. He was on the staff of Malaria Control in War Areas and its successor, the Communicable Disease Center, now Centers for Disease Control. He was PHS Liaison Officer with the Alaska Insect Control Project during the summers of 1948 and 1949. He was chief of the Entomology Section of the USPHS's Arctic Health Research Center in Anchorage, Alaska from its inception in 1949 until 1960. Other assignments included duty in Greece, The Philippines, Ethiopia, and the "Lower 48."

Dr. Frohne was a careful, conscientious research worker who accomplished a great deal under very primitive, trying conditions, on a shoe-string budget while at the Arctic Health Research Center. He published at least 17 basic papers on mos-

quitoes, punkies, black flies, and snipe flies of Alaska. Especially outstanding were his life history studies of *Culiseta impatiens* (Walker) and *Cs. alaskaensis* (Ludlow). He was the first to recognize the new type of life cycle they represent—a single generation per 12-month period with inseminated females hibernating before taking a blood meal. Also noteworthy was an illustrated key to northern mosquito larvae based on characteristic saddle spines, hitherto a generally overlooked diagnostic character, and his characterization of the habitats of the larvae of the various species.

After retiring from the USPHS Dr. Frohne began teaching in Anchorage in 1964 at Alaska Methodist University, now Alaska Pacific University. He was a popular professor, highly esteemed by his students.

He died in Anchorage February 1, 1980 and is survived by 3 sons, Ivan, Richard, and James; his second wife, Mary and another son and daughter.

—Kathryn M. Sommerman,  
Beaver Cove, ME.