

## ASSOCIATION NEWS

### PRESENTATION OF THE JOHN N. BELKIN AWARD TO THOMAS HENRY GARDINER AITKEN<sup>1</sup>

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Thomas H. G. Aitken as a student at  
the University of California

On this occasion the American Mosquito Control Association is presenting the John N. Belkin Award to Dr. Thomas Henry Gardiner Aitken for his outstanding contributions to our knowledge of mosquito biology, taxonomy, and diseases transmitted by arthropods. I have been privileged to have been a fellow student with Tommy and a colleague for over 48 years.

As you probably do not know we are welcom-

<sup>1</sup> Presented at the 60th Annual Meeting of the American Mosquito Control Association, San Diego, CA, on April 11, 1994.

ing home a native son of California. Tommy was born in Porterville, California, in 1912. Porterville is notorious for being one of the few communities in California that has steadfastly refused to organize a mosquito control program. In spite of his origin in Porterville, Dr. Aitken has made major contributions to our knowledge of mosquitoes in California. While a student at Berkeley from 1932 to 1940, he wrote 16 scientific papers, 14 of which were on mosquitoes.

He was the first to record the appearance of *Aedes nigromaculis* in California in 1937. This species soon became the major pest in the Central Valley. Also newly reported at that time was *Aedes flavescens*. He first recorded *Psorophora confinnis* (now *columbiae*) in southern California—again now known as a major pest. His Ph.D. thesis and a series of 4 papers provided a comprehensive knowledge of the *Anopheles maculipennis* complex in North America. A major paper included the taxonomy and biology of 4 *Anopheles* species including the new species he described as *Anopheles freeborni*. He traveled the state from border to border collecting new distribution records. He advised mosquito abatement districts, developed simplified keys so operators could identify their field collections and organized training sessions at the Annual Conferences of Mosquito Abatement Officials in California. He offered a free identification service for live or dead mosquitoes mailed to Berkeley. You must realize that no Districts had employed entomologists at that time.

Tommy was the last student to complete the Ph.D. degree under Professor W. B. Herms. He had a formidable thesis committee—W. B. Herms, S. B. Freeborn, and K. F. Meyer. Tommy was a true pioneer on mosquito research in California and a disciple of Herms and Freeborn.

Tommy always was an avid collector of any interesting "bug" and in the early 1940s exchanged tabanid flies and mosquitoes with John Belkin who was then a graduate student at Cornell.

By 1940, World War II had developed, Tommy had completed his Ph.D., had a low draft

number, and couldn't find a job. In 1941, he applied for a commission in the U.S. Army, and in June, became a First Lieutenant. This began his second career. Colonel James S. Simmons, Chief, Preventative Medicine Division, Surgeon General's Office, immediately brought him to Washington, DC, to co-author *The Anopheline Mosquitoes of the Northern Half of the Western Hemisphere and the Philippine Islands*. The Colonel knew a good man when he saw one and put him in key positions.

In October of 1941, Tommy was sent to the West Indies as Officer-in-Charge of the Army Entomology and Parasitology Section of the Puerto Rico Department Laboratory. In January 1943, he was seconded to Central America as Director of Malaria Control Operations associated with construction of the Pan American Highway. Subsequently (July–October) he acted as Liaison Officer/Instructor for the Armed Forces School of Malariology in Florida.

At the end of 1943, he was moved to the Mediterranean Theater where an epidemic of louse-borne typhus fever was to become a major problem. He covered Algiers, Cairo, and Italy in association with the U.S. Typhus Fever Commission. Hundreds of thousands of people including our troops were dusted with DDT.

The next assignment was to Corsica (March–November 1944) as Chief Malariologist, Allied Forces Command. This duty was followed by a return to Naples to become Chief Malariologist for the Allied Forces Command for the Mediterranean Theater—no small job. He returned to the Surgeon General's Office for temporary duty in November 1945 and was discharged in 1946 having completed 4½ years of distinguished service. He had received the Typhus Fever Commission Medal plus 4 other theater medals with 4 bronze stars. He was an imposing figure when he wore all his awards.

In 1946, Dr. Aitken joined the International Health Division of the Rockefeller Foundation and began a third career. He was assigned to Sardinia as "Entomologist for the Organization to Eradicate Malaria in Sardinia." In the next 5 years, he surveyed the anophelines of the island, organized an entomological scouting service of 2,000 to 3,000 men and participated in the operations of treating each larval source or resting site with DDT. This was all for the purpose of eradicating the vector and malaria. Within 5 years, malaria was eradicated and the vector could rarely be found in any areas where people lived. The classic book, *The Sardinian Project* by Logan, Aitken, and co-workers, was published along with 5 additional papers by Tommy. The Sardinian Government coined a gold medal to commemorate the eradication of malaria and Tom-

my was one of the recipients. He was still not satisfied the mosquito was eradicated, so he made a 2½ day trip on foot to a remote uninhabited area and found *Anopheles labranchiae*. Malaria was eradicated but the vector survived. After almost 50 years, Tommy may be returning to Sardinia this year for a reunion of co-workers and a celebration.

In 1954, Tommy was reassigned to the Trinidad Regional Laboratory in Port of Spain, Trinidad—a fourth career. He was to work for 12 years with Dr. Wilbur G. Downs, a renowned malariologist and virologist. Studies involved biological and taxonomic studies of mosquitoes, tabanids, sand flies, and ticks and determination of their importance as vectors of the 35 viruses discovered in the area. Tommy co-authored over 70 papers including investigations of a yellow fever epidemic, discovery of 18 viruses new to science, and collected many new insect species. As a side hobby, he wrote 8 papers describing bromeliads and other epiphytes he collected in Trinidad.

A most important activity was collection of reference arthropods for taxonomic studies by colleagues. He co-authored several papers with John Belkin and contributed extensive material to Belkin's papers on the mosquitoes of the Middle Americas and the Caribbean. The extent of his collections is reflected in the 28 new species of arthropods named after him by his colleagues.

From 1967 to 1970, Dr. Aitken was reassigned to the Belém Brazil Laboratory of the Rockefeller Foundation where he continued his entomological and virological studies. In 1971, he made his last move to "home base", the Arbovirus Research Unit at Yale University where he developed new laboratory methods for the study of arboviruses and demonstrated that mosquitoes could transmit yellow fever virus through their eggs to the progeny. He completed 42 additional papers that summarized current and earlier projects. He became involved in teaching tropical medicine to medical and public health students. In 1983, he retired to emeritus status. Guess what he does currently? On many days he returns to the laboratory or a classroom.

Dr. Aitken has received wide recognition for his accomplishments. In 1981, he received the Richard Moreland Taylor Medal from the American Society of Tropical Medicine and Hygiene for outstanding achievements in arbovirology. In 1993, he was the recipient of the Harry Hoogstraal Medal from the American Committee on Medical Entomology for outstanding contributions in medical entomology. In that same year The Caribbean Epidemiology Centre in Trinidad named its entomology and parasitology laboratory, "The Thomas Aitken Laboratory."

I must tell you several personal things about Tommy. He is a modest person. When he received the letter from Trinidad about dedication of the Thomas Aitken Laboratory, his first reaction was "why me?" At the same time he yelled to a neighbor, "Hey, I just learned a building in Trinidad is to be named after me, but I have to say it's a small building." His neighbor responded, "Yes, but it is not everyday that one has a building named after him."

Tommy always has been very cool when under pressure. I want you to picture this now distinguished scientist as he was in 1939. He was 10 feet up in a giant cottonwood tree helping me siphon the water from a tree hole. I was at ground level collecting *Aedes sierrensis* from the water.

In the process, the siphon tube became plugged, so I took a deep breath and blew-out the plug. Unfortunately, Tommy was peering down his end of the tube. I don't know if you are aware of the mess that tree hole water, full of tannic acid, debris, and mosquito larvae, can make on a clean face and shirt. It is all bad. As Tommy rushed down from the tree, I prepared to run. Then he said, "Bill, you shouldn't have done that." He is forgiving and we are still friends.

Thomas Henry Gardiner Aitken will you please come forward. You have had an unusual career and are the ultimate mosquito researcher. The American Mosquito Control Association honors you with the John N. Belkin Award for your accomplishments and we all thank you.

## REMARKS ON RECEIVING THE JOHN BELKIN AWARD

THOMAS H. G. AITKEN

At the time of his death, I had known John Belkin for almost 40 years. In fact, we were born within a year of each other, John in Petrograd and I in Porterville, near the southern end of the San Joaquin Valley. One might say it was World War II that brought us together in 1940. I had obtained my degree at Berkeley that June and in December I travelled east (by railroad) with two of my professors (Stanley Freeborn and Stanley Bailey) to attend an international symposium on malarology in Philadelphia. At the time, I was in the market for a job and one of my options was seeking a commission in the Sanitary Corps of the U.S. Army. Following the symposium, we visited the entomology departments of Harvard, Massachusetts Agricultural College, and Cornell. All the latter, I met "Mr. Mosquito", Dr. Robert Matheson and his teaching assistant, John Belkin. Back in Berkeley, I initiated correspondence with Cornell. Before long, John and I were exchanging eastern and western Diptera (mosquitoes and horseflies) for our respective departmental collections. This activity came to a

close in June 1941 when I received my commission.

Some 22 years later (1963), by which time I was employed by the Rockefeller Foundation and working in Trinidad, John Belkin asked be to collaborate with him and others in a study of the mosquitoes of Middle America. This we did and, over the ensuing 7 years, sampled the mosquito fauna of 12 West Indian islands and one locality in Brazil. From time to time I and others transported our collections to the University of California, Los Angeles. There, in his laboratories, one saw the intricate and painstaking work being accomplished by John and his students. Here the taxonomic studies of mosquitoes had risen to a stage of accuracy never reached before (accuracy of illustration and accuracy of description), and associated with this information were details of larval habitats and other mosquitoes frequenting them.

It was a great privilege to have been associated with John Belkin, and to know the man and his work. Thank you.

## 1994 AWARDS

Awards were presented at the Plenary Session of the 60th Annual Meeting of the American Mosquito Control Association in San Diego, CA, on April 11, 1994.

### AMCA AWARDS

*Medal of Honor*

Ronald A. Ward

*Meritorious Service*

Sally A. Wagner

*Presidential Citation*

Dan Ariaz

James W. Robinson

*Memorial Lecturer*

Mir S. Mulla

*Memorial Lecture Honoree*

Stanley B. Freeman

*John N. Belkin Award*

Thomas H. G. Aitken

*Special Recognition Address Lecturer*

William C. Reeves

*Special Recognition Honoree*

William B. Herms

*Past President's Plaque*

John A. Mulrennen, Jr.

*Best of Show, Photographic Society of America Silver Medal*

Jef Meul (Belsele, Belgium). *Ophion luteus*.

*Best Mosquito Slide, AMCA Special Award*

Richard W. Merritt (East Lansing, MI). *Anopheles stephensi*.

*Best Slide by an AMCA Member, Special Award*

Robert Copeland (Nairobi, Kenya). Mantid grooming.