

In Memoriam: Richard S. Patterson

Chronicled by Phil Koehler

Dr. Richard (Dick) S. Patterson, a prominent American entomologist and researcher, passed away on September 16, 2026 at the age of 94 in Gainesville, FL. Dick had a remarkable and colorful career as a USDA-ARS entomologist specializing in medical, veterinary, and urban entomology at the USDA's Insects Affecting Man and Animals Research Laboratory (IAMARL) in Gainesville, FL. He touched the many lives of coworkers and students, as well as mine. He was my mentor and helped me tremendously. I would like to share some of the stories that Dick liked to tell about his career. Dick's work mainly focused on the management of a wide variety of important pests, including house and stable flies, mosquitoes, cockroaches, cat fleas, and fire ants. He not only improved the management of insect pests by working in the laboratory, but he also proved control could be achieved in actual field locations in many parts of the world through releases of sterile male flies and mosquitoes, use of insect growth regulators for fleas and cockroaches, and biological control agent releases for flies and imported fire ants. Dick was a long-standing member of the Florida Entomological Society of America (FES). He was president of FES in 1989 and in 1992 was FES Entomologist of the Year.

Dick was born in Waltham, MA, on April 27, 1932, and he kept his Boston area accent throughout his life. He received his B.S. degree in 1954 and his M.S. in Entomology in 1955, from the University of Massachusetts. He entered the Army in 1955-57 as an Entomologist and was stationed in New York city. While entering a restaurant in downtown NYC, the entrance door was pushed, flew open, and hit him. He was rewarded with a kiss from Marilyn Monroe who was there with her husband Joe DiMaggio. In 1957, Dick left the army and became a graduate student at Cornell University and married Barbara Walsh, who helped support him through graduate school by working as a technician in nuclear science at Cornell University. He and Barbara thought they would never have a child, so they adopted a new baby, Charles. Almost immediately Barbara became pregnant and gave birth to their daughter, Alexandria. Despite the rigors and poverty of being a new graduate student with a wife and two small babies, he received his PhD in 1962 with a major in Entomology and a minor in Botany.

Dick was hired as a research entomologist 1962-1964 at the Florida State Board of Health Midge Research Laboratory in Winter Haven, FL, and was named Director of the Laboratory from 1964-1966. Entomology for the State Board of Health was directed by Dr. John Mulrennan Sr. who was credited as eradicating malaria from the state of Florida. The pay for the Board of Health was almost at poverty levels, so after two years in Winter Haven,

Dick changed to a higher paying job as a USDA research entomologist at IAMARL from 1966-70. During those years, Dick became good friends with the famous medical entomologist Dr. Carroll Smith who wrote the book *Principles of Insect Chemosterilization*. Dr. Smith at the time had gone to India to start a laboratory to investigate mosquito sterilization and sterile male releases for control. In 1970, when Dr. Smith left, he convinced Dick to take a leave of absence from the USDA for three years to be project leader for Genetic Control of Mosquitoes at the World Health Organization's ICMR in New Delhi, India. In that role, he supervised 18 PhDs and 147 support staff. While in India, he got infected with an exotic bacterial infection in his kidneys and bladder that plagued him for the rest of his life. Despite his health issues, his work in India developed methods for using sterile insect techniques to control mosquitoes. Towards the end of his stay, he was so influential in his research that he was introduced to Mother Teresa as a prominent scientist.

Following his time in India, he was invited to go to Tanzania for a year to help manage stable flies and other blood-sucking flies that were preventing the establishment of livestock operations in Africa. He discovered that 90-98% of the flies were *Stomoxys nigra* and described their behavior and activity patterns. This work established methods that were later used to help understand and manage tsetse fly vectors of sleeping sickness and nagana for humans and livestock. One of Dick's favorite stories was about living in Tanzania. As a dignitary, he was given a house to live in and a staff to cook, clean, and launder his clothing. He noticed after a few months that all his underwear was gone. Then he noticed that most of the village were wearing his white underwear instead of the traditional loincloth wrapping. His laundry was loved and distributed to many members of the community.

Dick returned to what later became known as USDA Center for Medical, Agricultural and Veterinary Entomology (CMAVE) in Gainesville, FL, in 1973 to become the Research Leader for Flies and Biological Control (1973-1982) and additional responsibilities were later added with Household Insects (1982-1988) and Imported Fire Ants (1988-1995). These were some of his most productive years.

In the early 1980's, Dick was contacted by Augusto Pinochet, the tyrant dictator of Chile, about controlling flies on Easter Island. In 1982, Dick toured Easter Island, did a survey, and reported that both house and stable flies were the problem. Unfortunately, natural enemies of flies had not been released on the island. So, Dick mass-produced pupal parasites, *Spalangia endius*, as well as seven other species of tiny, harmless parasitoid wasps and had them released on Easter Island. He also taught the people proper manure management techniques. The program controlled the flies without harming Easter Island's

fragile ecosystem. Upon returning to the U.S., he was contacted by the CIA to report on Pinochet's activities, but Dick really didn't have anything to report.

I first met Dick when I was a U.S. Navy Entomologist in 1974. Later in 1975 I became a professor at the University of Florida and was working on mostly livestock and poultry pest management. Dick had a project in the Florida panhandle on stable flies, which are called dog flies there. Every fall, the wind pushed stable flies from farms in the north down to the beach where they drove away tourists. Dr. David Williams was a researcher in Dick's group who was the inventor of the Williams Trap (a fiberglass panel with either glue or permethrin-treated yarn wrapped around it). The Williams trap in sunlight gives off a blue and UV color that is highly attractive to stable flies and either trapped or killed attracted flies. One of my first projects with Dick was to control the stable flies at a 4-H horse camp in West Florida. The Williams traps controlled the flies and prevented their movement into the community. The project received extensive inaccurate media coverage that improperly suggested that the entire NW Gulf Coast of Florida be irradiated with blue/UV light to control the flies.

As a result of the 4-H horse camp project, the Palm Beach Polo Club reached out to us. They had horse events there with more than 2,000 horses, and house and stable flies emerged from the resulting manure. They suggested that we do the same kind of project for them. Dick said that he did not have a lab there, so they gave him a condo next to the polo fields as a lab for use during the weekdays because matches were played on the weekend. At the time, in 1980, Prince Charles of England was scheduled to play polo at a match after one week when 4,000 horses were on the grounds. Dr. Jerry Hogsette helped Dick with the project and created the world's largest compost pile, more than 50 ft high by 150 ft long, which prevented fly development and emergence. Prince Charles came to the Polo Club and did not get bitten by flies. However, he got heat stroke, fell off his horse, and was transported to the hospital. Dick saved some polo balls that he later displayed in his office.

In 1981, Dick incorporated the Household Insects Research Section into his group at USDA. He invited me to move to the USDA, across campus from my Extension office on the UF campus, and help him get the research reoriented for field work on cockroaches and fleas. That began a 35-year collaboration between Dick and me. Our first field project was on the IGR, hydroprene for German cockroach and methoprene for cat flea control. We also did some of the first field work on hydramethylnon cockroach bait. The German cockroach work was done in affordable housing. Dick and I would go from door to door, to gain access so the treatments could be applied. It was unbelievable what we saw during those days. We saw a dead pig slaughtered in a bathtub for food. Hot boiling water had been poured into cockroach harborages to control them, and that shorted out all the appliances. Also, there was once a murder that occurred next to our roach sticky traps. At

first residents were suspicious of us, but after they realized we were just there for cockroaches, they were not worried about us being police.

Dick was very influential in training dozens of graduate students at several universities. He had adjunct professorships at the University of Florida, Florida A&M University, and Michigan State University. He was appointed to the Florida A&M curriculum review team and was contact person for Florida A&M's Capacity Building Grant (\$1 million).

Over the years, Dick and his research group won just about every award presented by the USDA. He considered the Technology Transfer Award from the Federal Laboratory Consortium in 1989 as the most significant because it was a competition among all Federal Laboratories. But actually, his most significant award was when he was named USDA Outstanding Scientist of the Year in 1991, which required him to travel around the world to speak at major Universities. Since he always enjoyed field work, he would always ask to go out to collect flies and their parasites. He told the story about Thailand where they drove him to a small village that had a sewage lagoon covered over with tall vegetation. He walked onto the dried manure lagoon coating and unfortunately broke through the crust into the viscous mud and feces. He put his elbows out to keep him from going all the way under. He called for help because he was hidden by the tall vegetation and the more he struggled the deeper he got into the mud. Eventually his driver heard him, got a rope, tied it to the jeep, and pulled him out "like a cork in a bottle." Because he was covered with mud and feces, they made him strip off all his filthy clothes. The entire village came to observe him being washed off with a hose. He was well-remembered as an American tourist with no clothes.

Dick had a wonderful wife, children, grandchildren, and great-grandchildren. He maintained a longstanding love of animals and enjoyed volunteering at the Humane Society. He also had a passion for antiques and fine art that he collected locally and embellished his assortment of many items from countries where he worked. He was also forgetful when packing and leaving for trips. He actually forgot his suitcase for a trip to an NPMA meeting in Hawaii. When he arrived at the meeting, he had to go shopping for some clothing.

Dr. Richard (Dick) Patterson's life spanned 94 years, and people around the world have benefitted from his scientific research. He was a blessing for his family, cooperating scientists, and the many entomology students who benefitted from his mentorship and are now enjoying wonderful careers. His legacy continues.



Dr. Richard (Dick) S. Patterson



Nancy Hinkle, Phil Koehler, Dick Patterson, Richard Kramer, and Dan Suiter



Dick Patterson with his USDA staff and students at Imported Fire Ant Conference in Athens GA with back row Dave Williams, Dick Patterson, Karen Vail, Bob VandeMeer, David Oi, front row, Juan Briano, Dan Suiter, Roberto Pereira, Nancy Hinkle