Obituary

Richard Herbert Foote (1918–2002)

Richard H. Foote, a longtime member and former President of the Entomological Society of Washington, died on February 9, 2002. Known fondly as “Dick” to his many friends and colleagues, he passed away suddenly, at the age of 83, of complications following a broken hip. Among the highlights and accomplishments of his long career, Dick became a world recognized specialist on the taxonomy of fruit flies, served as leader of the Systematic Entomology Laboratory, ARS, USDA, and was an early advocate for the use of computers for information storage and retrieval in entomology.

Richard Herbert Foote was born on May 2, 1918 in Bozeman, Montana, by eight years the elder of the two children of Herbert and June Foote. He was raised in Helena, where (in the words of his sister Katie Osborne) “We got the full benefit of the unlimited love and care of our parents—an old-fashioned way to bring up children in a family. We were raised according to Christian tradition, and both of us were always confident of our parents’ love as long as they lived.”

Dick’s interest in biology had its roots in his father’s work as a sanitary and civil engineer. Herb Foote worked for the State of Montana from 1923, when he assumed the position of Director of the Water and Sewage Division of the Montana State Board of Health, until his retirement in the 1950s. He led the successful efforts to rid Montana of typhoid fever through his work on the drinking water systems of the state and received an honorary doctorate for his work in parasitology from the University of Montana. As a youth, Dick traveled with his Dad on some of his business trips about the state. Dick’s mother June (Melton) Foote, was a Registered Nurse, with a degree from University Medical College, Kansas City,
Missouri in 1910, where she worked until 1916, when she and Herb were married and moved to Bozeman. She was a stay-at-home mom who, together with his father, provided a stable, warm, and loving environment for Dick and his sister.

Dick was a graduate of Montana State University, Bozeman (B.S. in Entomology, 1941). His formal education was interrupted by service in the U.S. Army in World War II (5/1943–6/1945), mostly in Europe where he was a clerk in the Office of the Chief Surgeon (12/1943–6/1945), attaining the rank of Tech. Sgt. He worked as a copy writer for Western Catalog Company (1945–46), and then as a self-employed pest control operator in Montana (1946–47). He was then employed as a curator of the collection of medically important insects of the Public Health Service, Center for Disease Control, in Atlanta, Georgia (10/1947–9/1949), after which he earned a doctorate from Johns Hopkins University, School of Hygiene and Public Health (Sc.D. in Parasitology, 6/1952). His dissertation concerned the taxonomy of the immature stages of Culex mosquitoes.

In March 1952 Dick was employed by the U.S. Department of Agriculture, Bureau of Entomology and Plant Quarantine, in the unit that later became the Systematic Entomology Laboratory, to help produce a manual of medically important mosquitoes. In 1954 he was assigned responsibility for flies affecting plants, after which he conducted extensive taxonomic research on fruit flies (Tephritidae).

In the USDA Dick served in numerous administrative positions, including Assistant to the Chief, Insect Identification and Parasite Introduction Research Branch, Entomology Research Division (1960–65), Assistant Branch Chief, IIP (1965–72), and Laboratory Chief, Systematic Entomology Laboratory (1972–76), which then included 28 scientists and about 40 total staff. He returned to full time research on fruit flies in 1976, and although he retired from the USDA in May 1983, he continued this work until publication of the *Handbook of the Fruit Flies (Diptera: Tephritidae) of America North of Mexico* in 1993.

Dick was fond of editing and was good at it. He served as Editor for the *Journal of Economic Entomology*, the Thomas Say Foundation publications, the *Miscellaneous Publications of the Entomological Society of America*, the *Proceedings of the Entomological Society of Washington*, and the *Journal of the Washington Academy of Sciences*, and as an Assistant Editor for the *Annals of the Entomological Society of America*. After his retirement he worked part time as a copy editor for the Entomological Society of America publications until three months before his death. Dick was an active member of various professional societies, especially the Entomological Society of America, the Entomological Society of Washington, the American Institute of Biological Sciences, the Washington Academy of Sciences, and the Council of Biology Editors. He also belonged to the American Association for the Advancement of Science, American Mosquito Control Association, American Society for Information Science, Kansas Entomological Society, Society of Systematic Zoology, Sigma Xi, and the Council of Biological In-
formation (London). He served as president of the Washington Academy of Sciences and the Entomological Society of Washington.

Dick's scientific publications (listed below) included 90 taxonomic works on flies, 10 publications on information retrieval, 32 book reviews, and 3 obituaries. Not listed are numerous reports and editorials he wrote. His research involved six families of flies, in which he described 12 genera and 68 species.

The majority of Dick's fly research concerned the taxonomy of Culicidae (mosquitoes) and Tephritidae (fruit flies). His work on work on mosquitoes included his dissertation on the larval and pupal stages of the Culex subgenera *Melanoconion* and *Mochlostyrax*, and a series of pictorial keys to various other mosquitoes, culminating in a manual for the identification of the medically important species (Foote and Cook 1959). His research on fruit flies, for which he is best known, included the description of 12 genera and 49 species. More importantly, however, Dick tackled several large projects that produced new data and synthesized previously published information, leaving a clear knowledge base that his colleagues could easily use and that his successors could build upon. These included his extensive revisions of the North American fruit fly fauna, culminating in publication of the *Handbook of the Fruit Flies (Diptera: Tephritidae) of America North of Mexico*, of which he was lead author, by Cornell University Press in 1993, a key to the Neotropical fruit fly genera (1980), and catalogs of the fruit flies of the Nearctic, Neotropical, Palearctic, and Australasian Regions.

Beyond his fly taxonomy, Dick will be remembered as a visionary in the field of information retrieval. In his Presidential address to the Entomological Society of Washington in 1969, he spoke of a "catalog for all seasons," a comprehensive automated index to all systematic knowledge about insects. In the late 1960s and early 1970s, Dick was a leader in bringing computer technology to address the problems of information retrieval in Biology, chairing or serving on all key groups, such as those of the National Academy of Science, American Institute of Biology and ESA. For Entomology and ESA, he delivered the first Thesaurus for any discipline (1977). In USDA he led automation projects to create the *Catalog of Coleoptera of America North of Mexico* and a fruit fly information system. These were prototypes for larger efforts to catalog all insects. Unfortunately, neither the appropriate amount of resources nor computer technology were then available to bring these project to full fruition, but the concepts and designs Dick developed inspired and greatly aided our later efforts to produce databases for fruit flies and other flies.

For more than a decade, Dick was a true leader of the Systematic Entomology Laboratory due to his vision of what Systematics should provide the larger scientific community. Under his direction and encouragement, projects to compile and verify the names of moths (Hodges, et alia 1983, Lepidoptera checklist), bugs (Henry and Froeschner 1988, Heteroptera catalog), flies, and beetles (see above) were begun. These were team efforts of extensive scope and vision. Indicative of his standing in the entomological community, in 1981 Dick received the Outstanding Entomologist Award in Systematics from the American Registry of Professional Entomologists.

We fondly remember Dick Foote not only for his accomplishments and innovative ideas, but also for his affable nature and eagerness to help others. He had a warm smile and a kind word for everyone. As an administrator at SEL, one of the largest laboratories in ARS, he tried to handle all aspects of "red tape," leaving his scientists free to concentrate on their work. Beyond his research, Dick also contributed to the advancement of knowledge about flies in lots of little ways, providing advice and encouragement to many colleagues and students. He and Martha loved to do things for others, such
Top: Dick and Martha Foote at party hosted by Ray and Sally Gagné to celebrate publication of "The Handbook" (1993); in background (l to r), Ron Hodges, Louie Blanc, and Al Stone. Bottom: Dick at work at "Adventures in Veneer" display.
as the wedding party they planned and hosted for Elmo and Ilse Hardy, the guitar Dick refinshed for Steven Hodges, and the many decorative boxes and other handmade wooden objects he gave as gifts.

Dick's interests outside of entomology were varied. One was building and playing a classical guitar. Martha recalled that he would get up an hour early on workdays to have quiet time to play it just for his own pleasure. He developed a great skill in marquetry and wood inlay work, creating beautiful boxes, clocks, trays, pinning blocks, bolos and belt buckles, many of them with inlaid designs, such as a person's initials or images of butterflies and moths. He designed and built special tools that he used in this exacting work. He also spent many hours working on his home in Springfield, Virginia, building walkways and retaining walls, a deck, a screened porch, and the interior finishing of a paneled family room including built-in bookcases, and later the retirement home at Lake of the Woods, Locust Grove, that he and Martha helped to design. After his retirement, Dick was an active participant in the National Association of Retired Federal Employees and an active member of the Democratic Party in Orange County, Virginia.

The center of Dick's life, however, was his family, including his wife Martha B. Foote, four children (Judi Merriman of Camarillo, CA, Elin Stewart of Locust Grove, Suzanne Stewart of Fredericksburg, VA, and Christopher Foote of Redlands, CA), his sister, Katherine Osborne of Coeur d'Alene, Idaho, three grandchildren, a great-grandchild, three nieces, and a nephew. He met Martha while opening the door for her at a party in 1963, and they were married the following year. She was an art teacher and department head at West Springfield High School until 1983. An avid gardener, she (and occasional helper Dick) landscaped and beautifully planted the yard of their home at Lake of the Woods where they together enjoyed 19 years of retirement, family life and community involvement.

In both his professional career and community and family life, Dick brought the qualities of patience, good will, humor, helpfulness and fidelity to all his responsibilities.

**Publications by R. H. Foote**


Foote, R. H. 1969. Recent advances in bioscience in-


FLY TAXA DESCRIBED BY R. H. FOOTE

Valentinibulla Foote & Blanc 1959 (Tephritidae)
Rhagoletoides Foote 1960 (Tephritidae)
Procecidochoroides Foote 1960 (Tephritidae)
Mylogyanoaenora Foote 1960 (Tephritidae)
Metatephritis Foote 1960 (Tephritidae)
Paraterrellia Foote 1960 (Tephritidae)
Cryptoterinae Blanc & Foote 1961 (Tephritidae)
Lecza Foote 1978 (Tephritidae)
Laksyetsa Foote 1978 (Tephritidae)
Caenoriata Foote 1978 (Tephritidae)
Neotaractia Foote 1978 (Tephritidae)
Capitites Foote & Freidberg 1981 (Tephritidae)
Asphondylia ilicicola Foote 1953 (Cecidomyiidae)
Culicoides denningi Foote & Pratt 1954 (Ceratopogonidae)
Culicoides wirthi Foote & Pratt 1954 (Ceratopogonidae)
Rubsaamenia keeni Foote 1956 (Cecidomyiidae)
Holoneurus strobilophilus Foote 1956 (Cecidomyiidae)
Dasyneura abiesemis Foote 1956 (Cecidomyiidae)
Conarinia oregonensis Foote 1956 (Cecidomyiidae)
Mycoecidopsis conica Foote 1956 (Cecidomyiidae)
Mycoecidopsis coryloides Foote 1956 (Cecidomyiidae)
Lestodiplosis taxicoris Foote 1956 (Cecidomyiidae)
Euaerestoides arnaldi Foote 1958 (Tephritidae)
Euaerestoides drexhachi Foote 1958 (Tephritidae)
Tephritis labecula Foote 1959 (Tephritidae)
Valentibulla thurmanae Foote 1959 (Tephritidae)
Euxesta lutea Foote 1960 (Ulidiidae)
Paraterellia superba Foote 1960 (Tephritidae)
Paraterellia vurtif Foote 1960 (Tephritidae)
Trypetra angustigena Foote 1960 (Tephritidae)
Tephritis opaciennis Foote 1960 (Tephritidae)
Tephritis signatipennis Foote 1960 (Tephritidae)
Tephritis ovatipennis Foote 1960 (Tephritidae)
Tephritis candidipennis Foote 1960 (Tephritidae)
Trypeta angustigena Foote 1960 (Tephritidae)
Trypeta arcualis Foote 1964 (Tephritidae)
Trypeta duplex Foote 1964 (Tephritidae)
Trypeta platyplera Foote 1964 (Tephritidae)
Medetera wheeleri Foote, Coulson & Robinson 1965 (Dolichopodidae)
Tachytrechus greenii Foote & Coulson 1965 (Dolichopodidae)
Rhopalomyia truncula Foote 1965 (Cecidomyiidae)
Cecidomyia candidipes Foote 1965 (Cecidomyiidae)
Rhooleotrypetta rohweri Foote 1966 (Tephritidae)
Eurosta floridensis Foote 1977 (Tephritidae)
Valentibulla steyskali Foote 1977 (Tephritidae)
Lezca tau Foote 1978 (Tephritidae)
Laksycta trinotata Foote 1978 (Tephritidae)
Gonioxyina fuscata Foote 1979 (Tephritidae)
Gonioxyina hyalina Foote 1979 (Tephritidae)
Gonioxyina trinotata Foote 1979 (Tephritidae)
Valentibulla nudulata Foote 1979 (Tephritidae)
Neotaracta unimacula Foote 1979 (Tephritidae)
Trypetae caracasa Foote 1980 (Tephritidae)
Rhooleotrypetta tomatii Foote 1981 (Tephritidae)
Rhooleotrypetta penela Foote 1981 (Tephritidae)
Rhooleotrypetta jamaicensis Foote 1981 (Tephritidae)
Rhooleotrypetta adusta Foote 1981 (Tephritidae)
Trypetae bilineata Foote 1982 (Tephritidae)
Xanthaciura aczeli Foote 1982 (Tephritidae)
Gymnocarena flavata Foote 1987 (Tephritidae)
Trypetae viciniformis Foote 1987 (Tephritidae)
Urophora setosa Foote 1987 (Tephritidae)
Urophora claripennis Foote 1987 (Tephritidae)
Valentibulla dodsoni Foote 1987 (Tephritidae)
Trypetae vitiosa Foote 1989 (Tephritidae)

**TAXA NAMED IN HONOR OF R. H. FOOTE**

Alluaudomyia footei Wirth (Ceratopogonidae)
Campiglossa footei Thompson (Tephritidae)
Campiglossa footeorum Novak (Tephritidae)
Culicoides footei Wirth & Jones (Ceratopogonidae)
Dolichopus footei Harmston (Dolichopodidae)
Draconomyia footei Aczel (Tephritidae)
Floracarus footei Keifer (Acari: Eriophyidae)
Footerella Norrbom & B. Foote (Tephritidae)
Neaspilota footei Freidberg & Mathis (Tephritidae)
Polymorphomyia footei Korytkowski (Tephritidae)
Tephritis footei Goeden (Tephritidae)
Trypetae footei Frías (Tephritidae)

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