

## OUR RESPECTS

### Lucille F. Stickel, 1915–2007



Lucille Farrier Stickel, a pioneer in the field of wildlife toxicology, died in Asheville, North Carolina, on 22 February 2007. She was 92 years old. Dr. Stickel was born in Hillman, Michigan, in 1915. It was there that her love of all natural things began as she roamed the fields, woods, and lakesides near her home.

As her interests matured, Lucille earned a Bachelor of Arts, Phi Beta Kappa, in biology from Eastern Michigan University in 1936, and a Master of Science and Ph.D. from the University of Michigan in 1938 and 1949. In 1941 she married William Henson Stickel, a fellow University of Michigan graduate student. Bill became her lifelong research partner and stalwart supporter.

Bill took a position as a Wildlife Biologist with the Civil Service Commission in Washington, D.C., in 1940. In 1941, when he transferred to the Patuxent Wildlife Research Center near Laurel, Maryland, Lucille joined him there. Lucille was offered several positions, including one as an editor, but declined saying that the men with families recovering from the Depression needed the paying jobs more than she did. In 1943, after spending time as a volunteer, Lucille accepted a position as a junior biologist, beginning a long and illustrious career that paved the way for not only women in science but for the field of

environmental pollution research. The Stickels remained at Patuxent, living in modest government housing, until their retirement in 1982 with a combined total of 81 years of government service. Throughout their long careers, they dedicated their lives to the field of wildlife toxicology and played a major role in the development of the worldwide recognition of the Patuxent Wildlife Research Center.

Dr. Stickel published her first contaminant paper in 1946, reporting the results of a field study of a mouse population in an area treated with DDT. At that early date, virtually nothing was known about the harmful effects of pesticides on wildlife. Pioneering research by Dr. Stickel and her colleagues formed much of the basis for Rachel Carson's groundbreaking book, *Silent Spring*, which alerted the world to the dangers of pesticides. At that time biologists did not know what was causing population declines in several species of birds feeding high on the food chain. Eventually, in 1969, scientists at Patuxent published a paper linking DDE, a metabolite of DDT, to eggshell thinning in birds, which resulted in reduced population recruitment.

Dr. Stickel's concern with the toxic effects of environmental contaminants, especially pesticides and heavy metals, continued throughout her life. Her research, in collaboration with her husband, Bill, on the use of diagnostic tissue residues of contaminants represents one of the major accomplishments in the history of wildlife toxicology. They demonstrated that it was the concentrations of pesticides in the brains of dead birds that could be used to determine whether those chemicals were responsible for their deaths. Under her leadership, Patuxent scientists provided the laboratory proof that chemicals were directly related to population declines in many bird populations, including bald eagles.

Dr. Stickel's interest in plants and animals extended far beyond contaminants. She published 6 papers in the *Journal of Mammalogy* that dealt with populations of small mammals, and especially the estimation of home range size. She was a member of a small but notable group of women who made significant early contributions to the field of mammalogy. Also, her research on box turtle populations on the Patuxent Wildlife Research Center spanned several decades, as did her work with her husband, Bill, on black rat snakes. The box turtle work continues today and is considered to be one of the longest continuous studies of a wildlife species.

In 1968, Dr. Stickel was awarded the Federal Woman's Award. She also received the Interior Department's Distinguished Service Award. She was the first and only woman awarded the Wildlife Society's Aldo Leopold Memorial Award for "distinguished service to wildlife conservation," a distinction she received in 1974. Dr. Stickel also was the first woman to direct a major federal fish and

wildlife laboratory, serving as Director of the Patuxent Wildlife Research Center from 1973 until 1981. Over the years she was recognized as the “first lady” of the United States Fish and Wildlife Service, a mantle she wore with humility, but also with grace and charm.

In March of 1982, the Stickels retired to the mountains near Franklin, North Carolina. There they spent many happy years identifying the flora and fauna of their property and the surrounding area and supporting local land conservation efforts. Bill Stickel died in 1996.

Even after all the intervening years, Dr. Stickel’s profound influence on the field of contaminants research remains. The approximately 40 research scientists she hired at Patuxent have published over 1,000 scientific papers, chaired many symposia, and authored numerous books in the field. Several have gone on to leadership roles in the United States Fish and Wildlife Service and the United States Geological

Survey. As a testament to her continued influence and respect, 2 groups of research scientists she selected, mentored, and inspired visited her at her home in Asheville, North Carolina, in late 2006.

On November 15, 1998, more than 50 years after her first publication on contaminants, the Society of Environmental Toxicology and Chemistry, at its annual meeting in Charlotte, North Carolina, announced that it was presenting its prestigious Rachel Carson Award to Dr. Lucille Stickel. That award was further evidence of the staying power of her many contributions to the field of wildlife toxicology.

—**Nancy C. Coon.** United States Fish and Wildlife Service (retired), Elmwood, IL 61529, USA

—**Matthew C. Perry.** Patuxent Wildlife Research Center, Laurel, MD 20708, USA