

## AUTOBIOGRAPHICAL VIGNETTE\*

by

Thelma L. Ford (Smith)

Thelma was born in Fairton, New Jersey in 1928 the first of three children. Of an early interest in art, she can only remember her mother's photo album in which she "colored" black and white prints using crepe paper soaked in water and copied drawings from books consisting mostly of animals, usually horses. The first piece of art that she can call to mind making was a mallard drake which was carved from a choice piece of white oak wood her father had saved to make ax handles. Her father, among many interests, trades and pursuits, was first and foremost a woodsman who built small boats, made waterfowl decoys, was a ships' carpenter, deputy game warden, engineer-fireman on the railroads and ships and at his retirement had been for many years a wildlife assistant with the State of New Jersey, Department of Conservation and Economic Development. She received much parental interest and encouragement in projects and hobbies and especially so in reading and using natural abilities.

Thelma's high school years began in Millville, New Jersey in 1942, however she completed her high school education at what is now Garden State Academy presently located in Tranquility, New Jersey. Her art interest at this time was in the making of poster boards for school events and as art editor of the school yearbook.

She started college at Columbia Union College, Takoma Park, Maryland majoring in biology and worked part-time in the bindery of the college press. An invertebrate zoology course required an insect collection, the professor being a coleopterist, Gayle Nelson. This was the beginning of her interest in insects. Another interest was in botany and the first drawings of a scientific nature were those for a term paper prepared on medicinal herbs. She was a member of the Natural Science Club, her first camp-out being a trip to the Alleghany fly-ways in Pennsylvania during the annual hawk migrations. Art interest at this time was mostly in the form of posters related to events of the Natural Science Club as well as some other college clubs. She took no formal art training, the only courses then available at Columbia Union were preparatory requirements in art for elementary teaching.

In the winter of 1951, she made a visit to her adviser, Prof. Lester A. Harris, an herpetologist. He was her professor as well as her friend and has directed the lives of many to the field of natural science. One could not be long in his presence without being influenced by his life. Being financially unable to continue studying in pursuit of a degree, he advised her to find an occupation in which more than earning a living, she could make a contribution - using her talents and abilities and thus feel happy in her work. This established the beginning and direction of the road of this student to the office of C. F. W. Muesebeck, who was in charge of taxonomic research for the Bureau

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Her first assignment, in March 1951, began as a biological aid under the direction of Dr. Alan Stone located at the U. S. National Museum, Smithsonian Institution. Being a sixth-generation child of New Jersey, whose forefathers clung to the banks of the Mullica River and gradually trickled down to the wetlands and shores of the Delaware Bay, she had an instilled preoccupation with mosquitoes. Now the interest was transferred to the laboratory however, learning the techniques of preserving, preparing, pinning, mounting, making labels, recording data and other duties dealing with the maintenance of insect collections.

In June 1951, fiscal years being then what they still are, she transferred to the then Department of Parasitology and Entomology, Walter Reed Army Medical School, Washington, D. C.; Entomology being under the direction of Colonel Robert Traub. During the summer of that year, the hours as a biological technician were divided between the Museum of Natural History and Walter Reed. In time, portions of the Department of Parasitology were transferred to Puerto Rico and Entomology became a department in it's own right. The department was involved in a number of areas of study important to medical entomology. Thelma was one of many technicians who prepared thousands of specimens of arthropods including fleas, lice, chiggers, mites, ticks and mosquitoes; the time period encompassing the Korean War.

Training as a scientific illustrator began with the assembling, mounting and labeling of Siphonaptera plates under the direction and admonition of Thomas M. Evans, Scientific Illustrator for the department. In time, Col Traub asked Thelma if she was interested in illustrating, which of course she was. Her first drawings were line drawings in black and white of Anoplura, a species of the genus *Enderleinellus* for Dr. Phyllis Johnson. Under the training and skilled abilities of Tom Evans she learned the art of stipple shading, line drawing, importance of measurement, attention to details and proportion, composition and great quantities of patience. Printing collection and identification labels over a period of years hones the ability in the use of a fine pen, the rapidograph-type pen not being in much use at that time. Col. Traub gave her the encouragement, provided her with the will and time to learn and the opportunity to enter the field of scientific illustration.

Her first mosquito drawings were for a publication by Robert A. Hedeem entitled, "A review of the mosquito larvae of France. I. Genera *Culiseta*, *Mansonia*, *Orthopodomyia* and *Uranotaenia*." Mosq. News 18(4):308-321, 8 figs. (1958).

As time changes, so do men and the Department of Entomology came under the direction of Major Herbert C. Barnett, the emphasis of study shifted to the study of mosquito-borne diseases and their transmission, involving the rearing and maintenance of arthropod colonies such as chiggers, lice, biting-flies and mosquitoes. Dr. Ronald A. Ward, medical entomologist, began a study in malaria transmission and Thelma was assigned part-time in 1958 to assist in the rearing of mosquitoes and other technical duties necessary in the involvement of virus-transmission work. During this time she also illustrated the life cycle of the scrub typhus chigger mite, *Trombicula akamushi* (Brumpt).

Deciding to venture West, she moved to Scottsdale, Arizona in the fall of 1960. Finally, in January 1961 she was accepted as a trainee-electrical draftsman at the Western Military Electronics Center of Motorola, Inc. Completing her training period she became a senior draftsman with assignments on the space vehicles Mariner, Gemini, Apollo and Lunar module LEM.

In November 1964, she returned to Washington, D. C. to join a newly formed project as Illustrator, a position she still holds. The project was formed as a joint project between Walter Reed and the Smithsonian Institution to be housed in the Department of Entomology, National Museum of Natural History for the study of the mosquito fauna of Southeast Asia. It came to be known as the Army Mosquito Project, later changed to South East Asia Mosquito Project (SEAMP) and presently Medical Entomology Project (MEP). At its inception it was thought that the general requirements for illustrating would be corrections and additions as the major illustrations were being done by the illustrator staff at the 406th Medical General Laboratory, Tokyo, Japan. In time the emphasis was brought here, gradually increasing the illustrator staff, an illustrator generally assigned to a specialist and working in his or her area of interest. The major portion of Thelma's work has been with the genera *Heizmannia* and *Culex*, generally dealing with the immature stages and male and female genitalia. She also completed illustrations of the larvae for the forthcoming work on the Tabanidae of Arizona (in press), larvae for the illustrated keys to the genera of mosquitoes and eggs and immature stages of the *Anopheles (Cellia) gambiae* complex.

Thelma is senior illustrator of the MEP illustrator staff, and as such coordinates the production of the project's art from scientist to printer.

In the fall of 1966, scientific illustrators affiliated with the Museum of Natural History discovered that there were about 35 of them working in various corners and crannies around the Museum environs. Aware that they need not be doomed to professional isolation and to enable them to meet each other and talk shop, a series of monthly luncheon-lectures was suggested. Thelma and other members of the SEAMP illustrator staff participated in this nucleus resulting in the founding of a non-profit national organization of professional illustrators employed in the field of natural sciences in December 1968. This organization is known as the Guild of Natural Science Illustrators (GNSI). The primary objectives were to promote better understanding of the profession by the public and those persons requiring its services, to increase the respect of the profession by encouraging high standards of competence and to encourage and assist others with the desire and capabilities to enter the profession.

The Medical Entomology Project has contributed to the Guild the work from many of its own scientific illustrators and their special methods and approaches used in very specialized subject matter and their participation in providing informal meetings, instructive demonstrations, organized exhibits and the development of an apprentice-training program through which to hand down individually achieved skills.

Thelma is GNSI historian, presently indexing its accumulated Newsletters. She has exhibited her work in the majority of GNSI exhibits, - those held in collaboration with the annual meetings of the Association of Medical Illustrators, the Guild of Natural Science Illustrators-Smithsonian (1969), the International Congress of Systematic and Evolutionary Biology (1973) and the International Congress of Entomology (1976).