

## Child Prodigy, Pioneer Scientist, and Women and Civil Rights Advocate: Dr. Margaret James Strickland Collins (1922–1996)

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### Pioneer Lectures

# Child prodigy, pioneer scientist, and women and civil rights advocate: Dr. Margaret James Strickland Collins (1922–1996)

Vernard R. Lewis\*

#### **Abstract**

Often legends go unrecognized for their achievements in science and the betterment of society. In the case of Margaret Collins, it has been almost 20 years since her passing, and except for appreciation by a small cadre of termite experts, her contributions to entomology have received scant notice. However, her work and legacy have stood the test of time, and even today, she is considered, and often cited as, the definitive source for differences in toleration and resistance to drying among species of termites. At her core, Margaret was a field biologist, and she demonstrated it through her travels and termite collection trips to a dozen countries. Her long and illustrious career included publishing of scientific papers, tenured faculty positions, and service as a curator of the termite collection at the National Museum of Natural History, Smithsonian Institution, in Washington, District of Columbia. Margaret achieved many firsts during her life. She was the first African American female to be awarded a Ph.D. involving entomology at a major university. In addition, she was the first woman graduate student for the legendary isopterist and Professor of Zoology, Alfred E. Emerson. Her passion for termites remains highly visible in her published works. Her passion for her family and her strong support of civil rights for women and African Americans were less visible except to those she knew personally. This is her story.

Key Words: legend; isopterist; woman; diversity

#### Resumen

A menudo, las leyendas no son reconocidos por sus logros en la ciencia y la mejora de la sociedad. En el caso de Margaret Collins, que ha sido casi 20 años desde su muerte, y con excepción de un agradecimiento por un pequeño grupo de expertos de termitas, sus contribuciones a la entomología han recibido poca atención. Sin embargo, su obra y legado han resistido la prueba del tiempo, y aún hoy en día, es considerada, y, a menudo citado como la fuente definitiva de las diferencias en la tolerancia y resistencia a secado entre las especies de termitas. En su núcleo, Margaret era un biólogo de campo, y se demostró a través de sus viajes y viajes de recolección de termitas a una docena de países. Su larga e ilustre carrera incluyó la publicación de trabajos científicos, las posiciones sobre la titularidad, y el servicio como un conservador de la colección de termitas en el Museo de Historia Natural de la Institución Smithsonian en Washington, Distrito de Columbia. Margaret logró muchas primicias durante su vida. Ella fue la primera mujer afroamericana en recibir un Ph.D. la participación de la entomología en una universidad importante. Además, ella fue el primer estudiante mujer graduado para el legendario isopteristo y Profesor de Zoología, Alfred E. Emerson. Su pasión por las termitas sigue siendo muy visible en sus obras publicadas. Su pasión por su familia y su fuerte apoyo de los derechos civiles de las mujeres y los afroamericanos eran menos visibles, excepto a los que conocía personalmente. Esta es su historia.

Palabras Clave: leyenda; isopterist; mujer; diversidad

Margaret James (later changed by marriage to Strickland and Collins) was born in Institute, West Virginia, on September 4, 1922. She was the fourth of five children of Rollins James and Luella (Bolling) James. Margaret was surrounded by a nurturing and educated family; both of her parents were collegiately educated. Her father received bachelor and master degrees from Tuskegee Institute and taught at the Vocational Institute in town. Her mother did not finish college and was a stay-at-home mom; however, she instilled curiosity, an adventurous nature, and independence into her daughter. Reading and playing in

woods and a nearby barn were Margaret's early passions. The combination of a strong sense of family and academic achievement proved to be a strong foundation for Margaret to draw upon when she encountered challenges and opportunities in the coming decades.

Margaret was recognized as a child prodigy at 6 yr old, as evidenced by her being awarded the privilege to check out books at the West Virginia State College Library. Also at an early age, she demonstrated a knack for collecting items that included little critters found in her surroundings. Because of her precocious behavior and advanced read-

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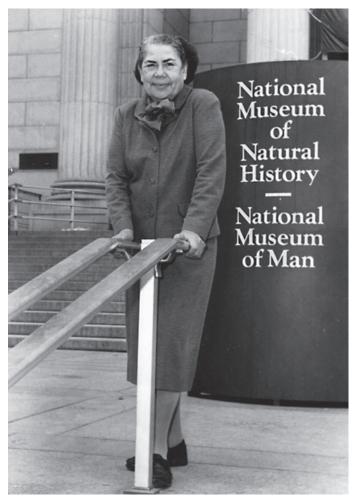
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M Studies Termites: Following the presentation of a paper on "Differences in Toleration of Drying and Rate of Water Loss Between Species of Florida Termites" to the 125th Annual Meeting of the American Assoc. for the Advancement of Science, Dr. Margaret S. Collins, professor of biology at Florida A & M University in Tallahassee, conducts experiment.



**Fig. 1.** American Association for the Advancement of Sciences news story that featured Margaret S. Collins as a young faculty member at the Florida A&M University, circa 1951. Image provided by Herbert and Veronica Collins.

ing skills, she was allowed to skip two grade levels and graduated from West Virginia State College's Laboratory High School at age 14. That same year, Margaret entered West Virginia State College and was awarded an academic scholarship. However, she did experience



**Fig. 2**. Margaret Collins outside the National Museum of Natural History, Smithsonian Institution, Washington, District of Columbia, circa 1991. Photo provided by Herbert and Veronica Collins.



**Fig. 3**. Margaret Collins wearing her field-collecting equipment during her 1993 expedition to Guana Island, British Virgin Islands. Photo provided by Barbara Thorne.

some difficulties as an undergraduate, as many women in science do in identifying a mentor. When two were found, Toye Davis and Frederick Lehner, both on faculty at West Virginia State College, she was re-energized. She later went on to complete her Bachelor of Science degree in 1943, majoring in Biology with minors in Physics and German. From West Virginia State College she went on to the University of Chicago to complete her Ph.D. in Zoology in 1949. Her mentor and thesis advisor was Professor Alfred E. Emerson, the legendary termite expert, who at that time maintained the largest termite collection and related book and reprint library found anywhere in the world. They first met at orientation day for new students at the University of Chicago, and the resulting mentorship, collaboration, and friendship would last for decades.

After completing her thesis, "Differences in Toleration of Drying among Species of Termites (*Reticulitermes*)," Margaret would become one of the first African American women to receive an advanced degree related to zoology/entomology (Fig. 1). The publication of her thesis is considered her seminal work (Strickland [Collins] 1950), and is often cited. During the next 30 years, Margaret would hold professorial titles with tenure at three universities that included Howard University in Washington, District of Columbia, Florida A&M University in Tallahassee, Florida, and Federal City College in Washington, District of



**Fig. 4.** From left to right, grandson Herbert Louis Collins, III, and Margaret Collins dissecting a termite nest at the National Museum of Natural History, Smithsonian Institution, Washington, District of Columbia, circa 1996. Photo provided by Herbert and Veronica Collins.

Columbia. See also held university administrative titles, as well as being the President of the Entomological Society of Washington. Margaret retired from Howard University in 1983 but went on to accept a senior research position at the Smithsonian Institution's National Museum of Natural History in Washington, District of Columbia, that same year (Fig. 2). She held this position until her passing in 1996 while conducting field research in Little Cayman, Cayman Islands. She authored or co-authored more than 40 research publications, mostly on the bio-



**Fig. 5.** Soldier termite of the Antillean (Isoptera: Nasutitermitinae), *Parvitermes collinsae*. This termite is native to the West Indies and was named in honor of Margaret Collins (Scheffrahn & Roisin 1995). Photo provided by Rudolf Scheffrahn.

geography, physiology, chemical defenses, and taxonomy of termites. She is best known as a world authority on the termite diversity in the Caribbean Islands and Guyana (Fig. 3), and the collection maintained in Smithsonian Institution still bears her name.

Those of us with collegiate degrees are well aware of the challenges and obstacles that can drain enthusiasm and delay completion, which include lack of funding, being away from home, and difficult and demanding courses and class loads. Margaret had all of these plus more. She grew up and attended classes during an era when, because of her gender and race, she was unwelcomed or denied admission. Confounding her obstacles, she also had to endure World War II and her first husband being away in the military, and after a second divorce, Margaret was left with few resources to raise and feed two young boys. In support of her children and career, she often went hungry. Worse yet, she had to endure racist epithets and even a bomb threat, all because she was supportive of equal rights that included driving African Americans less fortunate than her to work during a bus boycott in Tallahassee. Margaret's brave actions during the boycott included being chased by police cars and culminated in the bus company going out of business. Yes, the interruptions caused by segregation, racism, and divorce may have limited the number of publications on Margaret's curriculum vitae, but she never let these affect her love of her family (Fig. 4) and passion for termites (Fig. 5). These were the cornerstones of her life and will be her legacy; she will always be remembered affectionately as the "Termite Lady." For additional bibliographic works on Dr. Margaret Collins see Warren (1999) and ESA (2015).

#### **Acknowledgments**

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