

The Journey of Butterflies

Based on Research and Observations



Geethyavi Gunawardana

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Dedication

This book is lovingly
dedicated to my Mother,
whose kind support has
always encouraged my
writing journey.



Foreword

In an increasingly complex global future, the "Hemamala Upahara" book project, led by Mahamaya Girls' College, stands as a turning point in girls' education. Over a decade, it has successfully nurtured thousands of children to become young authors.

This year, by collaborating with other schools, we aimed to provide students with a wealth of new experiences. The goal was to develop multi-faceted skills, including communication, values, and creative growth. As a result, children have written books that pay tribute to Princess Hemamala, who brought the Sacred Tooth Relic—the supreme symbol of the Buddhist world—to the Hill Country (Kandy).

I extend my gratitude to everyone involved, including the students who contributed their creativity and the teachers who guided them.

Shashikala Senadhira

Principal

Mahamaya Girls' College

Congratulatory Message

It is a great honor for me, as the Governor of the Central Province, to send a congratulatory message for the launch of the books created through the Hemamala Tribute Book Creation Project initiated by Mahamaya Girls' College, Kandy.

Education is the fundamental foundation for the progress of society, and it is further strengthened through books and literary creations. It is clearly commendable that students' talents, creativity, and intellectual abilities are emerging through projects such as this.

I believe that this book creation project will provide valuable knowledge and a precious literary contribution not only to the students but to the entire society. Furthermore, I hope that through such efforts, future writers who will bring pride to Sri Lanka will emerge.

I extend my heartfelt appreciation and blessings to the Principal, the academic staff, the students, and everyone involved who dedicated themselves to this successful endeavor. I wish this project and the book launch ceremony great success.

Sarath B.S. Abeykoon

Governor, Central Province

Emeritus Professor, University of Peradeniya

2026.05.10

Congratulatory Message

I highly appreciate the noble and outstanding effort of the Principal and the academic staff of Mahamaya Girls' College, Kandy, the student daughters, the students of other participating schools, and everyone who dedicated themselves to plan and implement this book publication project. The project was organized under the leadership of Mahamaya Girls' College, Kandy, with the participation of other schools in the Kandy Zone, with the aim of encouraging children toward book creation within the current school system, as a tribute to Hemamala Kumariya who brought the Sacred Tooth Relic to Sri Lanka.

For several decades, Sri Lanka has been committed to providing free, compulsory, quality, and equitable education to all children, thereby producing a future generation of intelligent and skilled citizens. In such a context, this book creation program for school children helps develop creative ability, critical thinking, and other positive qualities for a balanced and well-rounded personality, and contributes to building a future knowledge-based society.

May all activities of the Hemamala Tribute Book Creation Project be successful through the blessings of the Sacred Tooth Relic.

Pradeep Nilanga Dela

Diyawadana Nilame,

Sri Dalada Maligawa.

2026.05.10

The Journey of Butterflies

My hobby

Observing insects in our home garden is one of my hobbies. The way they locomote, eat, and make their nests are the things I like to observe the most. Butterflies are one of the insects I always search for in our home garden. I have seen pictures of the life cycle of butterflies. The journey from the tiny egg to becoming an adult butterfly is very impressive. There are several kinds of butterflies in our home garden. Some are very small, some are big, and they have various colors. I was very curious to observe the life cycle of butterflies. with my own eyes, which I had read about in books.



Figure 1: Different caterpillars found in our home garden.



Figure 2: Different cocoons found in our home garden.



Figure 3: Different butterflies found in our home garden.

What is the reason I am interested in studying butterflies?

I have seen bunches of small butterfly eggs under leaves, as well as several kinds of caterpillars, cocoons (pupae), and flying

butterflies, but I have never seen the process of changes that occur during the different stages of their life cycle. Therefore, I was curious to observe the changes that occur during the different stages of a butterfly life cycle with my own eyes.

What was I planning to do?

1. To observe the changes that occur in the different stages of a butterfly life cycle with my own eyes
2. To see whether different caterpillars develop into different species of butterflies
3. To examine the different plants that attract butterflies to lay eggs and that caterpillars prefer to eat

What did I find from reading books?

While reading the books and searching the internet, I found that Sri Lanka is home to many kinds of butterflies [1]. Some butterflies are only found in Sri Lanka and are called endemic butterflies [2]. However, little is known about these butterfly species, including their life cycles, natural enemies, etc. To address this, many counties have established butterfly parks, where children can feed and observe them [4]. Sri Lanka has also launched some projects to protect its butterfly populations [5].

What did I do?

A transparent plastic container and materials collected from my home garden were

used for this research. I made holes in the lid with my mother's help, as shown in Figure 4. The caterpillars and fresh leaves were collected from the garden. A table was prepared to record the changes that occurred in the caterpillar over time.



Figure 4: Holes in the lid to allow air into the container.

As I could not find butterfly eggs as expected, I searched the garden and found some caterpillars on sweet potato leaves. I placed one caterpillar in the prepared plastic container along with fresh sweet potato leaves.

The container was then placed inside a plastic basin containing water at the bottom to prevent ants from entering the container. When I searched for butterfly eggs, I found that they had already hatched into small caterpillars. Therefore, these caterpillars were used to study the butterfly life cycle.

I continuously observed the caterpillar, and the changes were written in the prepared chart. The photographs, colour changes, and appearance of the caterpillars were used to discuss the observations.

What did I observed?

Table 1: Changes observed at the various stages of the butterfly life cycle.

Date	Observations	Remarks
Day 1 The day the caterpillar was introduced into the container.	- The caterpillar was very active - It ate continuously 	It appeared very hungry, as it was eating continuously.
Day 2 -Day 3	- The caterpillar has grown slightly - It has pooped a lot - It has been eating continuously	
Day 4	The caterpillar stayed in the same place and was not very active	It appeared to be full.
Day 4	The caterpillar was moving around the container	It appeared to be searching for a suitable place to make its cocoon.
Day 5	Caterpillar was hanging on the small stick placed in the container - In a moment, it began to release a thick, white liquid from its mouth	The process of making cocoon and detachment of its tail at the end, was so impressed.

	• It started to wrap its body with this thick material • It shook repeatedly to detach its tail and continued wrapping its whole body • Caterpillar completed making its cocoon 	
Day 6- Day 8	• The cocoon showed no movement, but its colour had slightly changed	
Day 9	• A small butterfly was observed on the dried leaves inside the container 	

I was very pleased to observe a caterpillar transform into a small butterfly, as described in books and as I had studied. The process could be clearly observed with the naked eye. Different kinds of caterpillars and butterflies are found in my home garden, which suggests that various caterpillars develop into different, beautiful butterflies. It took nine days for the caterpillar to become a butterfly. I would like to repeat this experiment to observe the life cycles of other caterpillars.

During this research, I also learned that ants are natural enemies of butterflies. While observing our home garden, I recorded the following observations related to butterflies.

Plants in our home garden where caterpillars were mostly found

- Brinjal
- Sweet potatoes
- Lemon
- "Anguna creeper"

Plants in our home garden where butterflies were mostly found

- Atteria tree (wild citrus)
- Jasmine
- Rose

Summary of the observations

- It was exciting to observe a caterpillar become a small butterfly, as described in books and as I had studied

- Caterpillars were observed to eat large amount of leaves before they forming their cocoons
- It was impressive to observe how the caterpillar makes its cocoon independently
- It was impressive to observe the caterpillar detaching its tail at the end of cocoon formation, the remarkable part of the process
- Ants were observed to eat butterfly, confirming that ants are natural enemies of butterflies

My recommendations

The experiment could be extended to observe butterfly life cycles by collecting butterfly eggs or caterpillars from different

plant species to study differences in their development.

Where did I get the details?

1. <https://www.slbutterflies.lk/>
2. <https://www.natgeokids.com/uk/discover/animals/insects/butterfly-life-cycle/>
3. Discover a world of information: Minibeasts, Blue Banana Books
4. <https://www.littledayout.com/butterfly-gardens-in-singapore-where-to-find-fluttering-wings-in-flight/>
5. <https://www.slwcs.org/butterfly-project>



Geethyavi Gunawardana

Afterword

With the approval of the Ministry of Education, this research-based project has empowered thousands of student authors for over ten years. Educationists recognize it as a program that significantly enhances the quality of school education.

In alignment with modern educational reforms, encouraging students to author a research work is a milestone in this journey. In this digital age of "Smart" technology, the modern school must demonstrate through research that books and technology should be used together. This is because the unique joy a child receives from a book cannot be replaced by anything else.

To prevent children from drifting away from books—which remain our primary educational tool and storehouse of human knowledge—Mahamaya Girls' College has spearheaded the "Hemamala Upahara" project for many years. Its primary objectives are to foster academic discipline, promote values, and pay tribute to Princess Hemamala, who fulfilled a historic mission to empower women.

We express our gratitude to the Principal, teachers, parents, alumni of Mahamaya Girls' College, representatives of other schools, the Diyawadana Nilame, and the staff of the Sri Dalada Maligawa (Temple of the Sacred Tooth Relic) for their support.

Seneviratne Mahalekam

(Project Creator)