



# Butterfly Taiwan Endemic Butterflies

Numerous butterfly species have been recorded in Taiwan. There are several reasons as to why the island has such high numbers of endemic butterfly species, but it is generally believed that the main source of Taiwan's butterflies came from the continent of Asia. Aside from the butterflies with ancestors from the Asian continent,

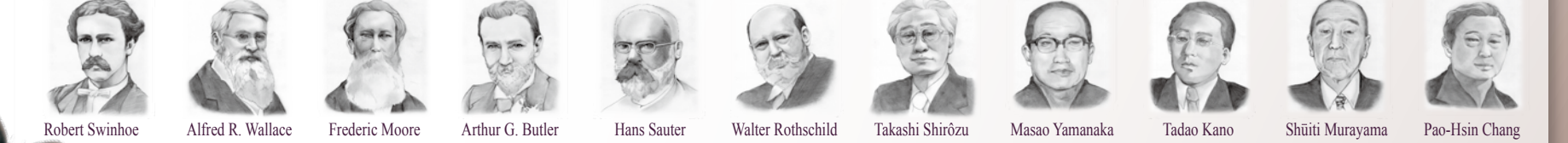
there are many convinced that some of Taiwan's endemic butterfly species were in fact oceanic, species that originated from Southeast Asian islands. Island-hopping is a continuous process of how butterflies spread. Several ocean species came to Taiwan, stayed and settled down. Since we are unclear about whether these

recent arrivals can survive on a regular and stable basis as well as blend-in with Taiwan ecosystem, we consider them as alien species. Nonetheless, there are species that arrived long ago and have subsequently made Taiwan their home, some even developed into endemic subspecies with unique morphological characteristics; we consider them as endemic species for they have already

become part of Taiwan's ecosystem. In an era of advancements and developments, it has been several years since the last sighting of these important endemic species possibly meaning that some of the species have already become extinct. The loss of one endemic species means the product of millions of years of evolution has died out creating a void in the balance of an ecosystem. How can we not care and not be on guard!



## Hall of Fame of Formosa Butterflies



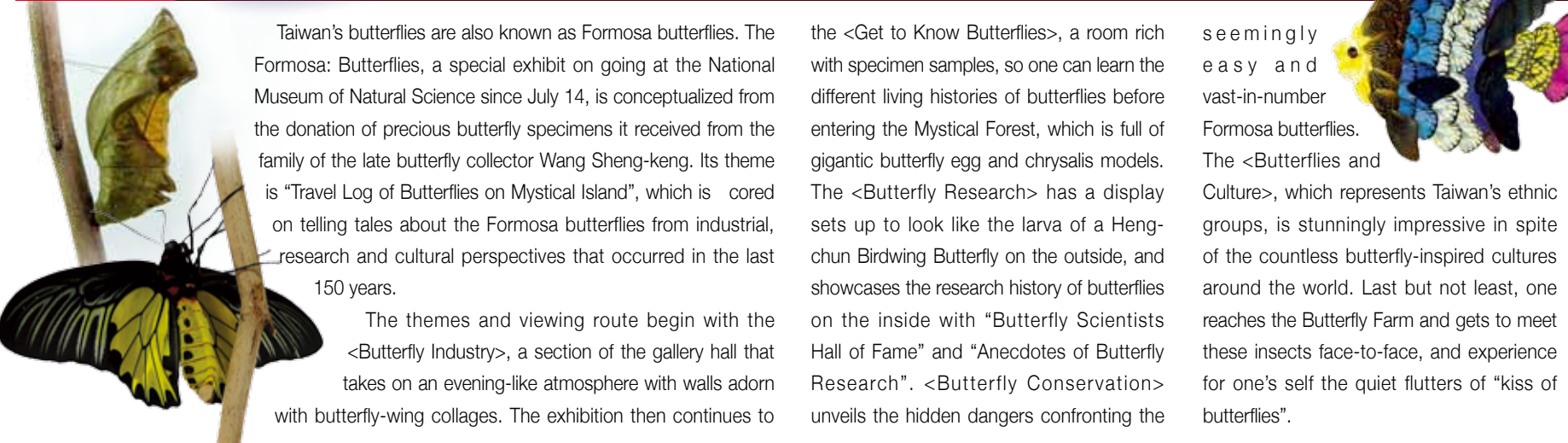
Nearly 150 years of butterfly research have passed since the first scientific report about Taiwan's butterflies was released in 1866. The discovery of more than 400 butterfly species on the 36,000-square km island has earned Taiwan the good name of "Butterfly Kingdom". This honor which was no easy feat was actually the result of hard work and dedication from

countless people. The Formosa: Butterflies, a special exhibition themed on Formosa butterflies, jointly created by the National Museum of Natural Science, the Taipei Zoo and the Department of Life Science of National Taiwan Normal University, has a unit titled "Butterfly Research". The contents in "Butterfly Research" are divided into "Butterfly Scientists Hall of Fame" and

"Anecdotes of Butterfly Research", each showing the stories of leading contributors to Taiwan's butterfly research history with interesting anecdotes that occurred during their researches respectively. This article introduces twenty foreign and domestic researchers named in the Hall of Fame, including Robert Swinhoe, Alfred R. Wallace, Frederic Moore, Arthur G. Butler, Hans

Fruhstorfer, Hans Sauter, Jinhaku Sonan, Teiso Esaki, Tadao Kano, Wei-Shou Chen and Yu-Feng Hsu with documentations of their lives and their contributions. There is also a brief history charting Taiwan's butterfly researches too. Hopefully readers will gain a basic understanding to Taiwan's butterfly research history and about the those involved in making that history too.

## Travel Log of Butterflies on Mystical Island



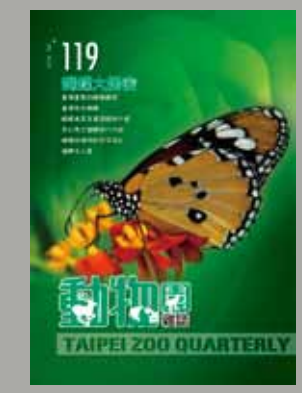
Taiwan's butterflies are also known as Formosa butterflies. The Formosa: Butterflies, a special exhibit on going at the National Museum of Natural Science since July 14, is conceptualized from the donation of precious butterfly specimens it received from the family of the late butterfly collector Wang Sheng-keng. Its theme is "Travel Log of Butterflies on Mystical Island", which is

cored on telling tales about the Formosa butterflies from industrial, research and cultural perspectives that occurred in the last 150 years. The themes and viewing route begin with the <Butterfly Industry>, a section of the gallery hall that takes on an evening-like atmosphere with walls adorn with butterfly-wing collages. The exhibition then continues to

the <Get to Know Butterflies>, a room rich with specimen samples, so one can learn the different living histories of butterflies before entering the Mystical Forest, which is full of gigantic butterfly egg and chrysalis models. The <Butterfly Research> has a display sets up to look like the larva of a Heng-chun Birdwing Butterfly on the outside, and showcases the research history of butterflies on the inside with "Butterfly Scientists Hall of Fame" and "Anecdotes of Butterfly Research". <Butterfly Conservation> unveils the hidden dangers confronting the

seemingly easy and vast-in-number Formosa butterflies. The <Butterflies and Culture>, which represents Taiwan's ethnic groups, is stunningly impressive in spite of the countless butterfly-inspired cultures around the world. Last but not least, one reaches the Butterfly Farm and gets to meet these insects face-to-face, and experience for one's self the quiet flutters of "kiss of butterflies".

# 抱動物園報



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 Taiwan Endemic Butterflies  
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 Travel Log of Butterflies on Mystical Island  
 Coevolution of Butterflies and Plants  
 Hall of Fame of Formosa Butterflies

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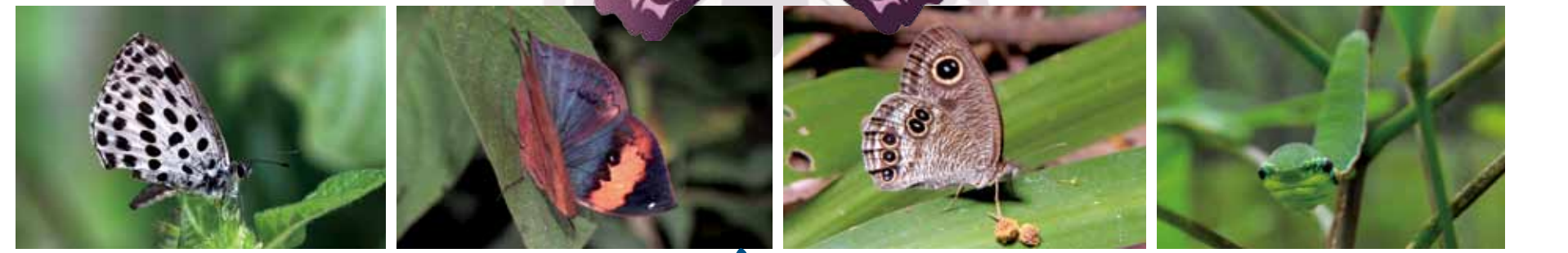
# TAIPEI ZOO PAPER

## 《 All about Butterflies 》

Being one of the more well known insects, butterflies do not commonly need much of an introduction. But how much do you really know about them? Do you know what the world is like seeing from butterflies' compounded eyes? Do all butterflies have six legs? Or perhaps you knew that butterfly larvae are fat little caterpillars that feed on leaves and that the favorite food of adults is flower nectar, but are you absolutely certain they are vegetarians? Are butterflies truly graceful fairies and could never be as filthy



as houseflies? Do they even pose one ferocious gene in them? Butterfly larvae have enormous appetites, what do they do to prevent their stomachs from bursting open gorging like that? Living in nature where danger lurks from all around, and at any given moment natural enemy could strike and take life away, what kinds of strategies do soft-bodied caterpillars and delicate butterflies practice to survive in the wild? These hidden secrets will be revealed to you one by one in "All about Butterflies" ...



## Taiwan's Important Butterfly Resources

Butterflies are beautiful dancers created by nature. Taiwan is fortunate to be rich in butterfly resources and is privileged to have them dancing from all corners of the land. Butterflies were once a contributing force that powered Taiwan's economic growth. Today they remain as a provider of dazzling colors making our lives lovelier. Formosa butterflies are well regarded both on the international-front and in the minds of the social public, thanks to the efforts of butterfly hobbyists and butterfly farms. These butterfly farms and eco-park operators are important participants to butterfly conservation. They not only help the general public to get to know about the butterflies and learn how to cherish these insects through eco-themed promotions, but they also raise and breed butterfly stocks on a sustainable manner. so that the population of wild butterflies won't be affected from the pressure of commercial harvesting. Today, recreational industries with tie-ins to butterflies and butterfly eco-farms are flourishing throughout Taiwan, and they help to lead Taiwan's tourism sector. With their rising visibility and educational pursuits, the public has come to view the habitat creation and operating management of butterflies with increasing importance.







Coevolution refers to the mutual evolutionary influence between two species triggered on by natural selection. The earliest record of butterflies appearing on Earth was dated six million years ago, indicating that this species was a latecomer compared to other insects. The coevolution between butterflies and plants take place as imago (adult butterflies) consume nectar from food plants and larvae feed on host plants.



# Introduction to Grass-Feeding and Nectar Plants Butterflies Consume



Nectar and grass-feeding plants are indispensable and symbiotic to butterfly survival throughout their lives, for they are an important part of the food chain in the ecosystem. Therefore, it is crucial to plant nectar and grass-feeding plants butterflies like to eat when creating a butterfly habitat.



## Related Chinese Idioms

Idioms are typically short sayings or words with fixed and complete meanings. They are the products derived from ancient wisdom, and have since become part of the language used by society today. The implications that idioms carry far surpass the meanings carried by



history of this animal being tamed as a pet or mouse catcher was short. There were no lions in ancient China. The few that were present during these times were tribute offerings from India. Although leopards were widely disbursed throughout China, due to their reclusive nature they were lesser known.

# Road to Conservation of Taipei Frog

In order to gain better knowledge about the Taipei frog, Taipei Zoo first got involved with the conservation tasks of this species in 1999, by actively engaging in habitat enhancements and restoration works for these frogs. The Zoo even converted the research findings into materials championing conservation, at the same time taking the general public on ecological trips to meet the Taipei Frogs and learn the beauties of Danshui Wetland. In the same year, researchers sighted Taipei frogs in a private water lily farm owned by Mr. Yang Weng-



Unfortunately, media coverage and reports about Uncle Stone and the conservation of Taipei frog led corrupted individuals to catch these frogs in 2004 just before breeding season. Moreover, a construction project of Baja Creek started in the same year causing huge amounts of muddy water to flow into the farm and destroyed their habitat, rendering the Taipei to a fate of total genocide.



# Battle against Apple Snails – A Funny Tale Improving Taipei Frog Habitat

■ Sung-Lin Wu



A photograph showing two individuals in a river. One person, wearing a white shirt and a wide-brimmed hat, is crouching and using a yellow net to catch fish. The other person, wearing a white shirt and blue pants, is also crouching nearby. The river is surrounded by green vegetation and rocks.

**Collect the Entire Set of  
Special Edition Tickets for Tiger Blessings!**



In total, four special edition tickets will be issued this year: 120,000 adult admission tickets and 80,000 discount admission tickets, each sporting a different animal – tiger, clouded leopard, lion and leopard cat. Quantities are limited, available until supplies last. Apart from the theme-based animal tickets, the Taipei Zoo has also produced a set of four badges commemorating the Year of the Tiger. Individuals who collected all four special edition tickets will be eligible to receive the badge set on-premise for free. For individuals who used an EASY Card to pay for admission or purchased group tickets, Taipei Zoo has made the animals appearing on the four special edition tickets into stamps. All visitors may get their seals affixed at the Tourist Service Center, as souvenirs documenting each and every exciting trip to the Zoo.

