



'Naturalist In' Series  
**IN THE NEW NEW WORLD**  
 A Review by Christopher K. Starr



A Review of: Philip Henry Gosse 1851. *A Naturalist's Sojourn in Jamaica*. London: Longman, Brown, Green & Longmans. This piece is 42nd in a series on 'Naturalist In' books. Previous reviews can be accessed at [www.ckstarr.net/reviews\\_of\\_naturalist.htm](http://www.ckstarr.net/reviews_of_naturalist.htm)

**Philip Henry Gosse (1810-1888) was born in England into insecure circumstances.** His early life was marked by hardship and often dire poverty. Because he had to go to work at an early age, Gosse had little formal schooling. However, there was much reading and writing at home at a time when the British working class was becoming increasingly literate and publishing was an expanding industry.

Gosse was physically sound and a thorough field naturalist, never happier than when out collecting and observing. He continued his excursions almost to the end of his life. He was a proficient writer of both popular science books and original natural history, illustrated with his own precise drawings and plates. His son, Edmund Gosse (1890, 1907), wrote two biographical accounts of P.H. Gosse, whom he said was "less in sympathy with the literary and scientific movement of our age than, perhaps, any writer or observer of equal distinction."

In 1832, at the age of 22, Gosse underwent a sharpening of his overall outlook that included a desire to devote himself to both natural history and religion. His life from that point was marked by definite purpose and, as expected, his writings were firmly in the natural-theology tradition. He became a stalwart of the Plymouth Brethren, whom his son called "a byword of bigotry and unlovely prejudice." They were regarded by the general public of that time much as the Jehovah's Witnesses are today, although with less warmth.

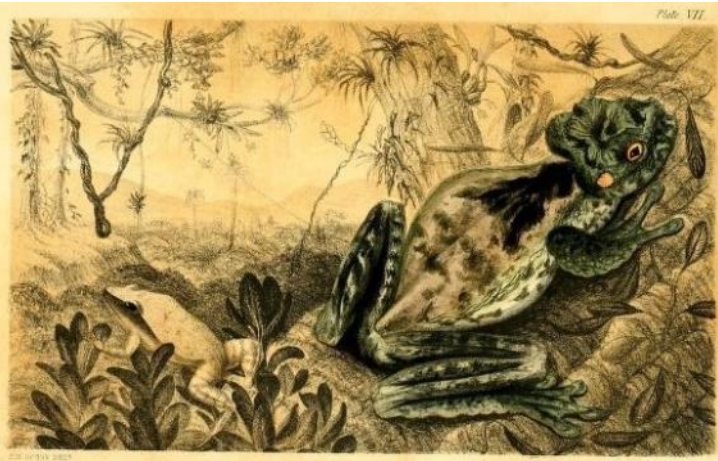
This all makes Gosse sound like a dreadfully compromised naturalist, yet that is far from the case. His observations were rigorous and reliable, as evidenced by his correspondence with Charles Darwin, who utilized some of Gosse's observations in the service of his theory of evolution. For his part, Gosse -- although a biblical literalist committed to the



**Gosse with his son Edmund in 1857**

special creation of all species -- remained in fruitful communication with Darwin even after the appearance of *On the Origin of Species*.

Likewise, his scientific attitude was solid. This latter is seen in his approach to the lock-and-key explanation of insect genitalia. It had often been remarked that these tend to be both complex (at least on the male side) and species-specific, so that in principle one could identify species in many groups according to genitalia alone. This gave rise to the hypothesis -- widely accepted until recently -- that species specificity provides a mechanical guard against wasteful false mating. Even as he endorsed this



**Two frogs endemic to Jamaica, *Osteopilus crucialis* (left) and *Eleutherodactylus luteolus* (right). The latter was long thought to be extinct until it was found in 1953, more than a century after Gosse discovered it.**

attractive idea, Gosse (1883) noted that it still required scientific demonstration. He was not about to rest on the idea (central to religious reasoning) that if it feels right it must be true.

Gosse's subject was the living organism in its natural habitat. At the same time, he often took animals into captivity in order to study them better. He was in open revolt against the excessive attention of his time to dead museum specimens, disregarding the living animal.

This is not to suggest that he despised taxonomy, just that he recognized its limitations, especially with respect to tropical animals. Given the state of information at the time, Gosse did a remarkably good job of identifying species and was careful to give scientific names, even of the species mentioned only in passing. He even described several new species.

As a young man, Gosse made two trips to North America, first to Newfoundland and Québec (Gosse 1840) and then to Alabama (Gosse 1859). During 1844-1846 he spent 18 months in Jamaica, an island that he had chosen because it was biotically little known. Like Henry Walter Bates and Alfred Russel Wallace a decade later (see reviews 30 and 31), he aimed to finance his visit through the sale of specimens to private collectors and public institutions.

There had been one earlier major natural-history effort in Jamaica. In a 15-month effort starting in 1687, Hans Sloane (1707, 1725) had collected about

800 species of plants, mostly new species. Sloane's personal collections later formed the nucleus of the British Museum (Natural History).

As expected, Jamaica was a rich hunting ground for Gosse, and he established a daily collecting routine. During the early period he was impressed by one novelty after another on a daily basis. His main attention was to the birds, leading to a book (Gosse 1847) that brought knowledge of the birds of Jamaica to a new level, including definite records of almost 200 species. The present book, then, is mainly about animals other than birds.

In another respect, Jamaica was a disappointment. He did not find the expected profusion of large and showy lepidoptera and beetles, which actually seemed less abundant than in Newfoundland and Alabama. Even so, unlike Newfoundland and Alabama, Gosse actually liked Jamaica.

Even so, he was socially quite isolated. He knew no other naturalist in the island except Richard Hill, a magistrate and native Jamaican in Spanish Town, who provided many personal communications. This book is by Gosse "assisted by Richard Hill".

He stayed at Bluefields, a former sugar estate near the shore in the southwest of the island and about eight kilometres from the summit of Bluefields Mountain. The mainstay of Jamaica's economy, the sugar industry, had been in decline since before 1800, so that during Gosse's visit plantation society was in a state of advanced decay. Very shortly afterward it was ruined by removal of the preferential tariff on sugar. Slavery had been abolished a decade earlier. Bluefields was neglected and largely allowed "to resume the original wildness of nature". It was bad for the owners, but it suited Gosse's purposes very



**Bluefields, Gosse's base in Jamaica**

well.

A *Naturalist's Sojourn in Jamaica* is in the form of a diary. The 84 chapters bear titles such as "Bluefield Mountain", "Sea-Urchins", "The Venus Lizard", "The Pond Turtle", "Periodical Rain", "The Brush-Footed Spider", "A Swarm of Dragon Flies", "The Red Hairy-Tailed Bat", "The Liguanea Mountains", "Nocturnal Forest Sounds", "Gregarious Trees". These amount to a few long essays and a great many short ones. The method -- seen in some other naturalist-in books -- is to begin with a particular observation on a given date, then to expand and generalize.

As an example, the description of a large estate house leads to an enumeration of the wild creatures living in it. Among other topics to illustrate his range: the lizard *Thecadactylus laevis* re-growing its tail, the red hairy-tailed bat *Lasiurus rufus* and great-eared leaf bat *Macrotus waterhousei*, yellow boa *Chilabothrus inornatus* and the incubation of its eggs, colour changes and the display of the dewlap in anoles, the orb web of *Argiope argentata*, the beetle *Pyrophorus noctilucus* with conspicuous glow spots on the thorax and abdomen, the abundant arboreal colonies of *Nasutitermes*, the *Conurus flaviventer* nesting in old *Nasutitermes* nests, rain-fly swarms and the process of dealation, the calabash tree *Crescentia cujeto* as a host of epiphytes, the sting of a scorpion (with a clinical description of the pain and other symptoms), and wild hogs, including hunting and cooking them. He was rhapsodic about tree ferns, while analytical at the same time. I regret that he seems never to have encountered the endemic iguana, *Cyclura collei*.


It bears mention that Gosse's description of nesting by a solitary wasp (*Sphex* sp.) indicates that her prey is not dead but disabled. This presaged Fabre's (1855) demonstration that the prey is paralyzed by stinging.

Gosse's fine sense of landscape is seen not only both in the text and some of the eight full-page plates. The extensive index is an indication of seriousness.

His prose is often either vivid or purple, depending on how you look at it. Here, you can decide for yourself:

"The wild scream of the Kildeer Plover is suddenly heard, and up springs a flock of these birds, which wheel in swift flight around the traveller's head, and alight close to their first station. In the rushy shallows

of the stream the stately form of the Snowy Gaulin is seen, deliberately wading hither and thither; or watching, motionless and silent, for his aquatic prey. Plump Peadoves, with large liquid gentle eyes, walk about on the turf beneath the pimento trees, picking up the fallen fruit, or the seeds of papilionaceous weeds; and now and their reiterated cooing, a very soft and mournfull sound, comes from the bordering woods, falling gently and soothingly on the ear."

Gosse never returned to the tropics, even as he remained an important and engaging English naturalist. That is worth another book review. 

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