

# Maria Sibylla Merian

## (1647 - 1717)

### *The First Ecologist*

Maria Sibylla Merian was a 17th Century naturalist, entomologist, and botanical illustrator. David Attenborough has described her as one of the most significant contributors to the field of entomology, and she is regarded as being one of the greatest botanical artists.

The young Merian began her artistic endeavours painting flowers, but at the age of 13 she became fascinated by insects, particularly caterpillars. Over the next few decades she recorded and illustrated the life cycles of 186 species. Her particular passion was the process of insect metamorphosis which she documented in great detail. In doing so she helped dispel the idea - first put forward by Aristotle - that insects were spontaneously generated, emerging from substances such as mud, dew, or even cabbages.

Merian wrote about insects and their habits, their food, and their place in ecosystems, with many of her engravings depicting ecological communities. Many historians of Science regard Merian as the first ecologist, two centuries before the word was invented.

Merian published several collections of engravings from 1675 to 1680. In 1699, at the age of 52, she undertook a remarkable 8000 km journey from the Netherlands to Suriname in South America. Accompanied only by her youngest daughter, she financed her journey by selling drawings. Merian's studies of the insects in the Suriname jungles resulted in her great work, *Metamorphosis Insectorum Surinamensium*, published in 1705 and containing 60 remarkable copperplate engravings. This work introduced Europeans to an exotic natural world vastly removed from their own, describing such extraordinary natural phenomena as bird-eating spiders and leaf cutter ants.

Merian's work was extremely influential during her lifetime and was used by Swedish naturalist Carl Linnaeus to classify insects. But in the centuries that followed, the work was largely forgotten. Finally, in 2017, on the 300th anniversary of her death, a number of major exhibitions were mounted to celebrate her remarkable life and achievements.



Main image: Portrait of Maria Sibylla Merian (Jacobus Houbraken, Public Domain)  
Background: Illuminated copper engraving from *Metamorphosis Insectorum Surinamensium*, Plate XLV. [Hannes Grobe/AWI; 2010, CC BY 3.0]

