Present Day Fact File

Moths

It is not just the pretty butterflies that are important pollinators in the forest; many of the trees and plants have flowers that open at night, especially so that they can be pollinated by moths!

Heavenly scent

These nocturnal flowers are generally heavily scented. Moths – especially the males – have an incredible array of scent detectors, often looking like a miniature flying satellite. Some of the flowers even go so far as to mimic the smell released by a female moth of a given species, hoping to attract love-struck males to pollinate their flowers. But even female moths will be attracted to flowers that smell strongly, tracking them across a considerable distance so that they can drink as much nectar as possible.

To help the moths home in once they get to the general area the scents are coming from, most night-flowering plants have simple white or dull yellow flowers. These tend to glow slightly in moon and starlight, making sure that the moths can see them well enough to visit as many as possible – and so spread the plants pollen wide and far.

Co-evolution

One tree – the Piranha tree of the Amazon flood basin – has developed an incredibly close link with moths. Every year the tree looses its leaves as the seasonal flood waters go down. Immediately it grows another crop of small juicy leaves, which soon become covered by moth caterpillars, hatched from eggs laid on the tree last year. These caterpillars strip the tree of most of its leaves, then spin cocoons and dangle from the bare branches. When it is safe, the tree sneakily grows a new set of proper leaves, as well as flowers. The caterpillars soon emerge form their cocoons as adult moths, and immediately start to drink nectar from the flowers, pollinating them for the tree. They fly off in search of other trees to pollinate, and to lay their eggs on ready for next year. The tree gains a personal pollination service, while the moths get a free nursery for their offspring!