



4K **SEX,
LIES AND
BUTTERFLIES**

1 x 50 min. Written by Janet Hess

4K, 5.1 + Stereo Directed by Ann Johnson Prum

Executive producers: Ivo Filatsch, Sabine Holzer



TERRA MATER
Factual Studios

Moths, butterflies and caterpillars are the protein that fuels the natural world. Birds and spiders, reptiles and small mammals are always on the hunt for these delicious snacks. In response, butterflies and moths have evolved an intriguing and fascinating array of tricks, guises and deflections to confound their would-be predators.

These delicate and fragile creatures are our planet's tiniest superheroes. This film dives deep into their world, highlighting their amazing survival techniques, and the new science that is unlocking the secrets of their world, forever changing our view of these fantastic creatures.

Moths and butterflies are going through one of the most miraculous transformations in the animal kingdom, and are able to travel thousands of kilometres in astonishing altitude and with unbelievable speed. They produce sparkling colours through their wings' nanostructures, and communicate with each other using exotic chemicals.

In South America, a butterfly called *Adelotypa annulifera* has struck a special deal with local ants, which leaves both parties profiting from the cooperation. The ants are 'baby-sitting' the butterfly's larvae; in return, the larvae are feeding the ants with a special secretion.

While moths have been flying around the planet for about 190 million years,

the oldest butterfly fossil is dating back roughly 55 million years. Today, around 20,000 butterfly species inhabit the globe. Their amazing life stages are the centre of attention now; from egg to caterpillar to chrysalis to the emergence of the full-blown, winged creature.

Already in their first stage of development, butterflies have evolved methods of self-preservation; freshly hatched caterpillars ingest toxic chemicals from their host plants, and alongside with gaudy colourations and hair-like add-ons, this toxic taste is acting as a means to keep predators away. Eventually, caterpillars develop into a chrysalis; only to undergo the next amazing metamorphosis, where the entire caterpillar is dissolved into a gooey liquid that functions as a kind of primordial soup from which the final creature is born. Weeks later, a beautiful butterfly or moth emerges, fluttering off into the world.

Scientists are starting to get a better grasp of how butterflies and moths see, avoid their predators, and why their flight techniques differ so extraordinarily from birds.

A study has even shown that the *Painted Lady* has dethroned the *Monarch* as the longest migrational traveller in the butterfly realm; it covers 15,000 kilometres on a roundtrip from Africa to the Arctic Circle, nearly double the distance of the *Monarchs'* famed trip—an epic journey that takes four to five generations of *Painted Ladies*.



NATURE

www.terramater.com

Terra Mater Factual Studios GmbH, Wambachergasse 2, 1130 Vienna/Austria,
phone +43-1-87003-0, fax +43-1-87003-27609, office@terramater.at