CHANGE IS THE NORM

NATURE'S CHANGES

A film by **Petra Lederhilger, Susanne Lummer, Andreas Ribarits** Executive producer: **Sabine Holzer 1×50 min., 4K, 5.1 + Stereo**



A question of existence. A matter of survival. The world shifts and turns, the animals evolve and learn. Change is the only constant. Magnificent, permanent, stable – our Earth. But is it really permanent and stable? Or is it in a constant state of flux?

n nature, change would appear to be a gradual process. And yet, a closer look reveals just how quickly the world around us can be altered. Wildfires ravage the landscape. Droughts decimate plant and animal populations. Excessive rainfall washes away everything in its path. On the planet's surface, only one thing is certain: nothing ever stays the same for long.

Natural disasters such as volcanic eruptions fundamentally alter the landscape, often leading to massive loss of life. Before long, however, new life appears as specialist species settle in affected areas and adapt to the new circumstances. On land or far below the sea, these new inhabitants soon attract others, which may be predators or prey. Or, in the case of garden eels, they may be both. The eels are masters of adapting to their surroundings: if they cannot find shelter, they soon construct their own.

Change can come remarkably quickly. One day, lush green grass sways in the wind. The next day it is gone, victim of a wildfire that sweeps the plains and consumes all that it encounters. Yet wherever there is tragedy, there are those who profit: the fire drives insects before it, right into the waiting beaks of the hungry bee-eaters. It is the easiest feast of their lives.

Rain brings floods that can be devastating for some but are a source of rejuvenation and rebirth for others. When the raging currents recede, they leave behind a changed landscaped full of new opportunities for

refreshment and nourishment, new breeding grounds and new sources of life.

Winter storms are often deadly. Icy temperatures and a lack of food claim the lives of numerous animals – but, once again, there are those who benefit. Scavengers and predators are able to find food without expending valuable energy hunting. In Scandinavia, wolves, wolverines and bears roam the winter forests looking for carrion, before taking shelter in their burrows and dens.

Without change, there would be no adaptation – which is the driving force behind evolution and the cause of diversity in all its forms, from the metamorphosis of insects to the emergence of plant species that feed on these very insects. These changes may be small, affecting just a few species or even a few individuals. But, in a world so interconnected, every

little change can spark a far greater process of transformation.

One species, in particular, has shown just how great an impact a large number of apparently localised, unrelated changes can have on the planet: humans. In just a few hundred years, we have fundamentally altered the surface of the planet and affected the natural rhythms that, for millennia, governed life on Earth. From climate patterns to migration routes, from the deepest ocean to the highest peak – the changes we have wrought have potentially had a greater impact than any single natural disaster or evolutionary process in history.

We have brought about unparalleled changes in a comparatively short space of time. Now it remains to be seen: will the planet and its inhabitants find ways to adapt to this new, ever-changing world, as they have done in the past? Or are there limits to what nature, in all its glory, is able to achieve?

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