



FLORA'S ARK

AN ARTISTIC SEED BANK AND STATEMENT OF HOPE

Flora's Ark, the photosynthesis solution

Climate change is a catastrophe in slow motion, caused by the way humans relate to nature. It might already be too late to reverse the trend. Our planet will then become largely uninhabitable. Research into terraforming Mars will soon be applicable on Earth. Starting from this disturbing idea, the artist group Tropism Art & Science Collective proposes an exhibition concept for botanic gardens called Photosynthesis. With photography, art, film, and installations they investigate ways of perceiving nature different from the common perspective. The centrepiece is Flora's Ark, a monumental terraforming time capsule with a small seed bank.

THE CLIMATE EMERGENCY

As a term, climate change doesn't sound very threatening. Changes can be good or bad, and what harm is there in a slight rise of summer temperatures anyway? But in fact, what we are dealing with is a major catastrophe threatening life on earth, and it is happening right now.

The artists of the Tropism Art & Science Collective investigate a scenario in which this climate catastrophe is already irreversible. It cannot be stopped, only be slightly toned down. Each year rising temperatures break record after record. Forests are burning, the polar ice caps are melting, sea levels are rising, permafrost is melting, deserts are spreading, storms and flooding are more frequent and severe, and pandemics are rampant. Animals and plants are becoming extinct at a speed not seen since the end of the age of the dinosaurs. Meanwhile, we clear-cut forests in an unprecedented way, pollute air, water and soil, suffocate the oceans with plastics, drill for oil in the last remaining wildernesses, and so on.

↖ *Biotope Box installation with sweeping plants, symbolises the remaining rainforests*
©Margot van de Stolpe

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Flora's Ark wants to be a monumental statement of hope.



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Extrapolating the statistics of this ecocide shows that someday soon the earth will become a barren place not unlike Mars. In anticipation of this scorched earth, we should already now prepare to revitalise the planet into the green-blue one it once was. What we have to do is some serious terraforming. The good thing is, we can do it right here, on earth. By not going to Mars we can even save billions in travel expenses. But we have to prepare for it right now.

JOIN FLORA'S ARK

The idea in anticipation of this worst-case scenario is the project 'Flora's Ark'. An initiative for botanic gardens, zoos, science museums, and other institutions. A Flora's Ark is a monumental artwork consisting of a time capsule containing a small seed bank and instructions to build a water vapour condenser for emergency irrigation. This enables small scale, but widespread, terraforming opportunities for future use. If you join, we can make this into a real Flora's Ark Armada.

STATEMENT OF HOPE

Of course, many botanic gardens do already have conservation plans and maintain seed banks. By proposing the idea for future terraforming, Flora's Ark aims to raise public awareness about the severeness of the climate catastrophe and the need for conservation.

Most of all, Flora's Ark wants to be a monumental statement of hope. Probably, most of the seed banks of the Flora's Ark Armada will not really be utilised in the future. They metaphorically state the hopeful promise of the resilience of nature and of mankind. Because the only sustainable solution to global heating is the elementary process of life itself: the photosynthesis of algae, of plants, of forests.

← *Help, projection mapping installation showing video typography with raging wild-fires. ©Alfred Marseille*



↑ *Flora's Ark monumental time-capsule, seed bank inspired on the cabbage butterfly egg.*

↑ *Flora's Ark monumental time-capsule based on the serotinous phenomenon of a Banksia, simulated at the Hortus Botanicus Amsterdam. ©Tropism team*

The concept of Flora's Ark time capsule is inspired by the serotinous behaviour of certain pinecones releasing their seeds after a fire.

CONCEPT OF THE CLOSED SEED CONE

The concept of the Flora's Ark time capsule is inspired by the serotinous behaviour of certain pinecones releasing their seeds after a fire. Likewise, the time capsule will be opened only after being exposed to severe heat, fire and drought. With this concept in mind, each time the capsule will be designed by a different artist or team, in consultation with the participating venue.

THE PHOTOSYNTHESIS EXHIBITION

The Flora's Ark monumental seed bank will also be the centrepiece of an exhibition called Photosynthesis. The Tropism Art & Science Collective has curated exhibitions under this name in the Hortus Botanicus Amsterdam (2013), in the Royal Botanic Gardens Edinburgh (2015), and in the Dutch Flower Art Museum (2018, 2019 and 2020). The exhibition in Edinburgh was the largest, with 140 artworks, 10 films, two big installations, and a plant concert. These exhibitions, made by artists and scientists associated with the collective, emphasize the fundamental source and force of life: photosynthesis. They are shedding new light on plants and do so in a variety of ways, often using scientific visualization techniques. The current exhibition proposal, called 'Photosynthesis versus Ecocide', focusses on the extrapolated impact of the climate catastrophe. Disguised as an art exhibition it confronts us with treats like deforestation, dying coral reefs, mass-extinctions, and the misperception of biomass. It celebrates the most important and elementary force of life: Photosynthesis. Interested venues can visit the page www.tropism.eu/floras-ark for more information and guideline downloads.

TROPISM ART & SCIENCE COLLECTIVE

A tropism (from Greek τρόπος, tropos, 'a turning') is a biological phenomenon, indicating a turning movement of a biological organism in response to an environmental stimulus. The most common example of tropism is a plant growing in the direction of light. Taking their lead from the biological phenomenon, the Tropists are a Dutch collective of installation artists, visual artists, photographers, designers, filmmakers, technologists, and scientists. In their work, they deal with phenomena occurring literally or figuratively at the edge of perception - events that are hardly noticed, but which trigger reactions similar to the way plants respond to light. The Tropists feel a great affinity with the natural world, and their work seeks to depict natural phenomena in new and unusual ways. Tropism triggers the tide to turn.



↑ From the series *Flora Imago*, a trampled down herbarium of yesteryear. ©Margot van de Stolpe



↑ Sample of a series of contemporary dead trees photographed in infra red giving a future view in an apocalyptic spectrum. ©Robin Noorda



↑ Diorama artwork made in X-ray. The transparent flowers with chameleon stand for the resilience and adaptivity of nature. ©Arie van 't Riet

← "Leyduin" from the series *Places*, unravelling virtual forest landscapes. ©Alfred Marseille

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