

FLOAT

INTRODUCTION

We are FLOAT.

Let us introduce ourselves as an aquatic liberation of land.

We are an imaginative seed-company that produce and distribute seeds from floating platforms with a focus on breeding seeds that are specialized in growing in flooded environments.

This summer FLOAT established their first floating seed producing platform with capillary systems in Southern Denmark with great success. The first harvest of seeds in the history of FLOAT has been made, and this is celebrated by the publication you are holding in your hands.

CATASTROPHE

The change of climate is a reality. Extreme conditions of floods and droughts will soon either cause a shortage of land or water.

This shortage can have catastrophic outcomes in relation to our current food production. Where and how will we grow our crops, if the fields are flooded or with difficult possibilities for irrigation?

We believe that the answer lies in floating platforms build with capillary systems so water is obtained under optimal, and favourable conditions and with minimal human interaction.

By simultaneously developing our seeds specially bred to grow with a maximum outcome under the conditions of the floating platforms, we will gain a superior method for producing food under the coming change of the climate.

CHALCHIUHTLICUE

We have just taken our first steps to fulfill our vision, with a fruitful outcome from this years harvest. But we are not the first ones to grow crops on water. The ancient people of the Aztecs built their empire on an island and filled the surrounding lake, Texcoco, with the so called *chinampas*. The chinampas were human-made islands, built from the nutritional mud from the lake and constructed in squares with branches. From these islands the Aztecs provided them self with bountiful amounts of maize, beans, squash, tomatoes, chili peppers and flowers.

As a tribute to the aquatic agricultural success of the Aztecs we have given our first generation of seeds the name after the Aztec goddess of rain, Chalchihutlicue.

CAPILLARITY

Capillarity is a physical phenomenon that became a key-notion for the irrigation of our plants. This fenomen is a manifestation of surface tension, that can be observed when a narrow tube is lowered in a liquid. The narrower the tube, the higher the liquid will be elevated.

The function of capillarity is found in many materials with the structure of fibres, as in for example textile and paper. This is also how a tree transports water from the root to the treetop.

Our floating platforms are all build with a system of capillarity, and do therefore not use pumps for irrigation. Water is only elevated with natural forces.

By this type of irrigation we have carefully chosen the placements of our floating platforms. Watercourses nearby land used for agricultural purposes are often polluted with nutrients from manure. This is influencing the ecological system of the watercourse. By having our platforms in these watercourses, they will benefit from the nutritious water and at the same time work as a filter for the pulloing compounds.

TLALOC TEMPLATE

At FLOAT we

believe in the idea of open source. A great idea should be shared. Therefore this is a template that can help you to build your own floating platform to grow grain, vegetables, berries or flowers.

We call these platforms Tlalocs.

The Tlaloc is created from materials and tools that you will be able to get in any hardware shop. Be aware that the materials of the Tlalocs are not biodegradable. Therefore the maintenance of the Tlaloc is important, and remove it from the site when it is not in use.

COMPONENTS

Underneath is a list of the different components and how to combine them. The illustrations in the center is showing the layers of the different components.

This template is for a Tlaloc at the standard size 120x120x22,3 cm. It will be capable of floating with a weight up to 250 kgs. Big enough to carry you and your crops. Take a look at the template, and make your own Tlaloc before the spring comes!

SOIL

Take the soil from the site where you will place the Tlaloc. You will need around 0,1 m³ for this type. You can fertilize it with pondweed and mud from the pond, lake or creek.

WOOD FRAME

The wood frame can be made from battens at the standard size 38x73mm. Cut them in a length of 116,2cm and combine them in a square with screws or nails.

STYROFOAM

Use 2 floor insulation plates made in styrofoam for the floatable part of the platform. The size of each should be 60x120x15cm. Cut 6-8 holes in them with a diameter of 10 cm.

ROCKWOOL

Cut pieces of rockwool in sizes of 10x10x20cm. Place the rockwool in the holes in the styrofoam with the fibres vertical. Use gloves for handling this material.

NET

A net or a coarse fabric is needed underneath the styrofoam and rockwool, for keeping it on place. The size should be minimum 140x140cm. Connect it to the wooden frame with staples.

PLANKS

2 planks with the length of 120cm, should be placed underneath the fabric in a cross. Drill holes in the outer parts of the planks and attach ropes. Connect the ropes tightly with the upper frame, so the construction is fixated.

COME ON – FLOAT!

Connect all the parts as they are listed above except the soil, which is added at last. Put carefully the platform in the water and attach the platform to a tree or heavy stone with a rope. The size and shape can be varied as you like it, but remember to make it in a size that is easy to handle, as the Tlaloc will get heavy.

The rockwool will irrigate the platform through capillarity, so all you have to do is sow your seeds at springtime and wait for the summer. – We hope you will gain great floating crops and an important insight in new solutions for our land. Together we are keeping the roots of the future in movement!

Float will soon be able to provide you with great seeds for your Tlaloc, that will secure you a sprouting experience – So stay informed at our website Chalchihutlicue.com

Please adress questions concerning this publication to our communication manager Sidsel Bonde - sidselb@float.com

