

LE BRETTON LOUIS (FRANCE) 1. YEAR MAG. WINTER SEMESTER 2022/23, AT2



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DESIGN STUDIO EFLER DEPARTMENT OF ARCHITECTURAL CONSERVATION FACULTY OF ARCHITECTURE, CTU IN PRAGUE





As our urban farm aim is to recreate a connection between former agricultural fields and the current Mnichovo Hradiste inhabitants, our project is based on the contemporary concept of permacultur based on the ecosystems functionning. Thus, our permacultur farm creates differents zones working together in symbiosis to increase plants productivity without any biocide using and any industrial machine.





According to the year

In order to understand the needs of our food production and storage, it was **important to modelize the fields productivity** all along the year. Based on the experience of Julien Leray, a french civil engineer who launched a crowdfounded project in 2018 to design a permacultur project with his scientific backgroung, we finally determined that our food production should reach **6,5 tons a year**.



URBAN FARM How to apply permacultur principles in Mnichovo Hradiste?

ZONE 4

ZONE 3

ZONE 2

ZONE 1

BARN





STORAGE FUNCTIONNING How to design food storage ? 600

500

As our urban farm will produce tons of vegetables a year, it was necessary to design **a storage system which fits perfectly with the farm production**. Our researchs drove us to imagine three differents storage spaces in the café basement.



Salad, Lamb's lettruce, mesclun, and spinach : 550 kg

Shallot and onion : 1400 kg

Squash : 790 kg

Apple : 180 kg Beet and carrot : 600 kg Cauliflower and cabbage : 420 kg **Pear :** 120 kg **Plum :** 120 kg

WALL CONSTRUCTION

2 layers solid wood panel air chamber

thermal insulation

white plaster finish

concrete wall









AFTER SCHOOL CARE SIDE OF THE PROJECT

