

MANIFEST



What is the one thing that connects all people in the world? What is the most important thing in the world? What rules the world? It is money, in any form. Whether it is interpreted in a currency or in the form of goods, money is the element without which no modern culture on Earth could exist. Money signifies wealth, power, and fame, but also health, security, and prosperity. In our modern society, everything revolves around money. This is also true in Romania, specifically in the Danube Delta. Due to the comparatively low standard of living, money plays an even more significant role here. Environmental protection is not a top priority for the people, as they have bigger problems to contend with. They do what brings them the most money, and the main source of income is tourism.

I believe that we must harness the power of money for sustainability. In order to achieve our climate goals, sustainability should not be the primary focus, but profit. This means that sustainable projects must primarily generate financial gains, with sustainability being secondary. This does not imply that money is more important than sustainability; rather, a positive financial gain makes the sustainable aspect more effectively communicated to people, even if they may not initially perceive it.

Therefore, my initial idea for a sustainable institute in the Danube Delta is a project where positive financial gain takes preference. Sustainability comes in second and is as important as Profit. The project should explore economic opportunities beyond tourism. What brings the most profit aside from tourism? Initial aspects to consider could be the available resources and historical context, such as traditional craftsmanship. The goal is to provide people with a secure and simultaneously sustainable future perspective.

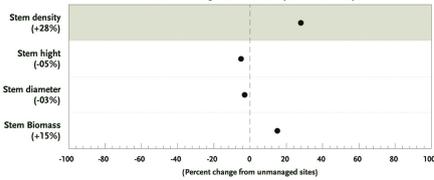
Resources are extracted from nature, and even sustainable resources must be harvested from a natural environment. A balance between natural occurrences and harvesting is therefore necessary to maintain the sustainability of the resource. Financial gain is heavily dependent on this mindset. If nature is overly depleted, it harms both profit and, consequently, sustainability. The most widespread resource in the Danube Delta is reed. Hence, it makes sense to create a concept for economic growth based on this resource. The goal is to establish an industry around the raw material of reed, enabling the local population to become more financially independent from tourism. Primarily, this raises the standard of living for people. Additionally, awareness of sustainable resource management is fostered.

Traditional construction methods often rely on the essence of practical and simple application of materials. One could even say that many traditional construction methods in the Danube Delta are based on the principles of low-tech architecture. High tech and low tech are two broad meanings for modern technical and, in contrast, simple solution approaches. A building always consists of these two principles. For sustainable construction, it is necessary to balance both principles. Nowadays, many buildings are adapted to the latest high-tech standards. However, the basis of every building is a simple low-tech solution, even if it's just a simple canopy to protect against rain. However, this simple aspect is increasingly disappearing in Central Europe. In the Danube Delta, it is the opposite. The majority of buildings here are forced to rely on simple low-tech architecture because it is cheaper than modern high-tech building techniques. The goal should be to establish a balance between high-tech and low-tech in favor of the quality of life for people. It will rely on natural materials in the environment, forming the basis of the buildings. Sophisticated systems, construction methods, and the application of materials form the framework of sustainable construction.

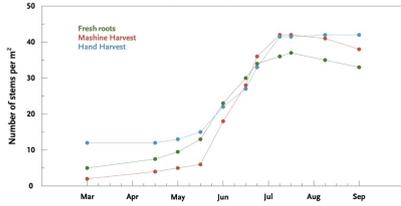
REASERCH ON THE EFFECT OF HARVESTING REED

EFFECT ON PLANTS

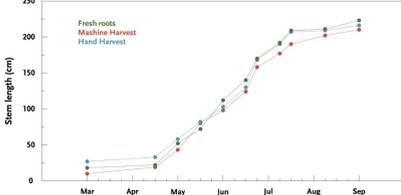
Effect on *Phragmites australis* (Common Reed)



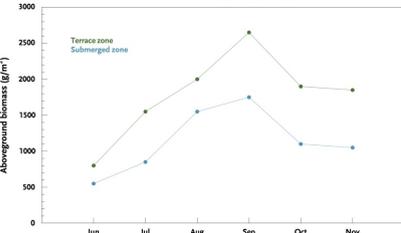
Reed growth rate | Stem numbers



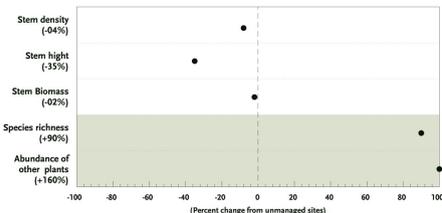
Reed growth rate | Stem length



Biomass of reed throughout growing season

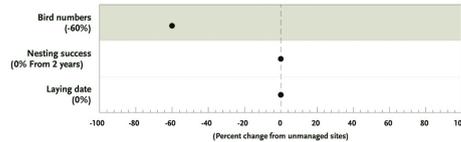


Effect on other plants

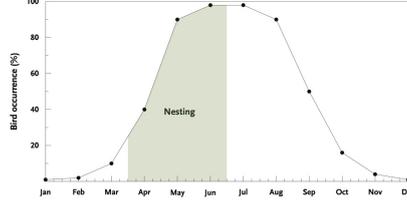


EFFECT ON ANIMALS

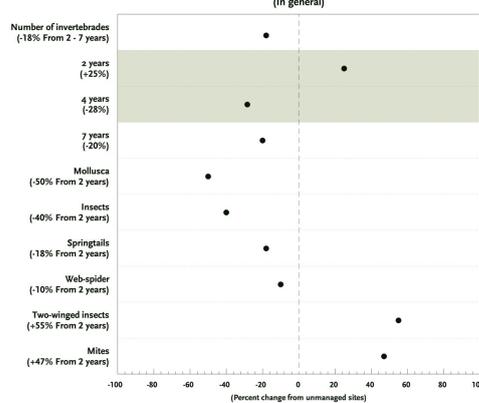
Effect on Birds



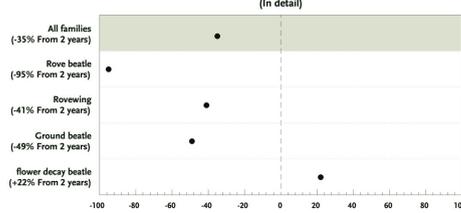
Bird occurrence



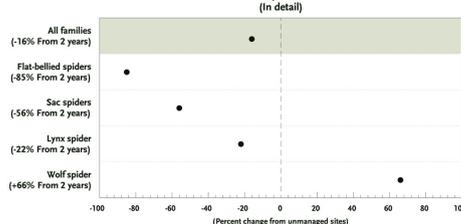
Effect on invertebrate numbers (In general)



Effect on beetle numbers (In detail)

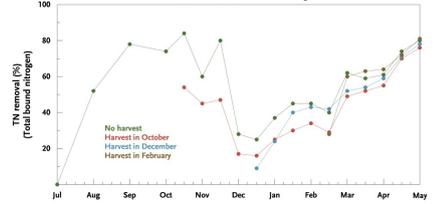


Effect on Spider numbers (In detail)

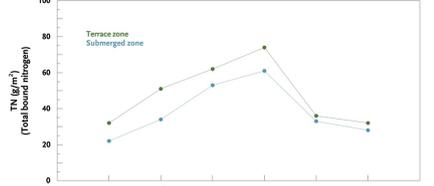


EFFECT ON THE FILTER EFFECTIVENESS

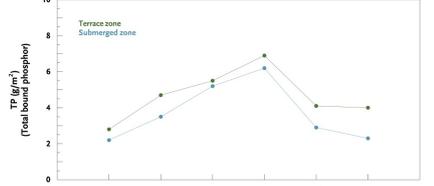
Harvested reed removal of Nitrogen



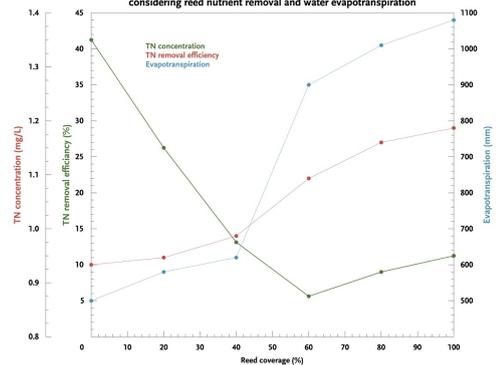
Aboveground TN storages of reed



Aboveground TP storages of reed



Nitrogen concentration in water for different reed coverage by considering reed nutrient removal and water evapotranspiration



Phosphorus concentration in water for different reed coverage by considering reed nutrient removal and water evapotranspiration

