**CETAF\_ Mission Biodiversity**

**Meeting Tartu**

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**Motto:**

**In freshwaters, there is a great opportunity to objectively substantiate biodiversity change via eDNA analysis**

**THE SITUATION**

**Biodiversity in continental freshwater**

* Differential distribution and biodiversity store in ponds, lakes, springs, streams and rivers.
* Within each aquatic habitat, there is a specific fauna and flora for each subhabitat: plankton, benthos, interstitial layer of streams, etc.
* We know that distribution lists of species like **Limnofauna Europaea** are accumulative but we do not really know **if present richness of species** is equal to those cumulative lists forged along more than 100 years of research.
* There is a hard need to document the real biodiversity now, to evaluate dynamic change with the past and model adequate biodiversity forecast.

**Question**

**Concerning continental waters, a reasonable question is if substantial biodiversity change is due to**

* ¿Climate change or human increasing demand on water resources?

Important to note is the increasing European population from 498 m (1913) to 742 m (2000) (Wikipedia: <https://en.wikipedia.org/wiki/Demographics_of_Europe>), and the increasing demand of water resources for human use.

**THE MISSION**

* Ascertain real biodiversity content in selected hotspot via eDNA
* There is a huge molecular information (DNA barcoding and others) available to make an international project feasible and realistic to get updated biodiversity richness data in selected areas at a fraction cost than with traditional biodiversity survey methods.
* It will allow an inspiring and remarkable collaboration among research academic institutions in Europe.