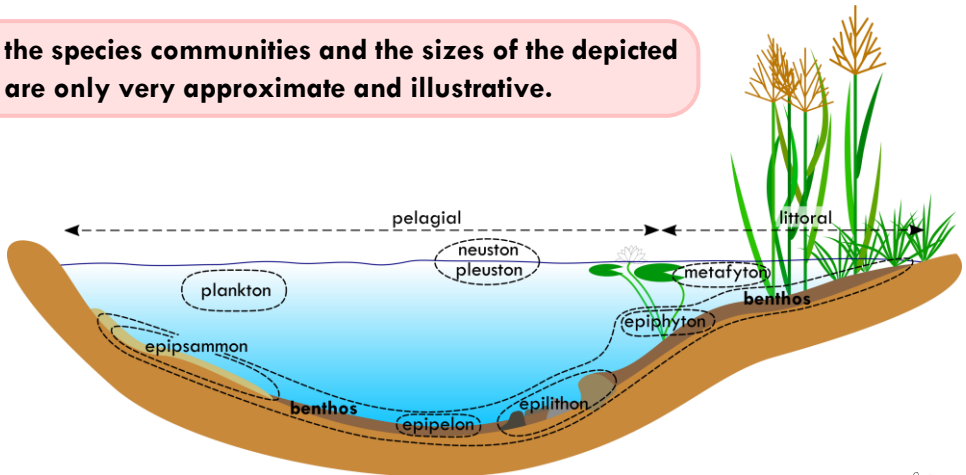


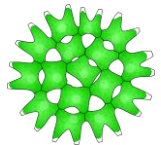
On the following pages you will find **examples** of what samples of different communities from different habitats might look like. In order to understand the following pages correctly, it is important to keep in mind that:

Trophic state of an ecosystem simply means its **nutrient content**. The main **nutrients** are dissolved **phosphorus** and **nitrogen**. **Eutrophic** bodies are those that have an **excess** of nutrients (most ponds), **mesotrophic** are at an **intermediate** level of nutrient content (e.g., some reservoirs, better quality ponds), and **oligotrophic** have only a **minimum** of nutrients (this includes peat bogs, preserved flooded sand pits and quarries, lakes, etc.). Intermediate stages are called combinations of the names of both stages (e.g., meso-eutrophic, oligo-mesotrophic). The trophic status of a biotope is also closely associated with the taxonomic composition of the community inhabiting it.

Both the species communities and the sizes of the depicted taxa are only very approximate and illustrative.



Plankton is a community of organisms floating freely in the water mass. The term **phytoplankton** refers to cyanobacteria and algae, while the term **zooplankton** refers to heterotrophic protozoa, crustaceans, rotifers, etc.



Periphyton, or **growths**, is a community of organisms living sessile on submerged substrates. Depending on the type of substrate, we distinguish different types of growths: **epipelton** between fine particles of mud or sand, **epiphyton** on plants, **epilithon** on stones, **epipsammon** on sand and **epizoon** on animals. The main group of periphyton is **diatoms**.



Benthos is traditionally referred to as a community of bottom-dwelling organisms. It is mainly composed of the epipelton. It is difficult to define it precisely and distinguish it from the periphyton, which is why both communities are very similar – **diatoms** also play a major role here. Since a lot of organic matter settles to the bottom, there are many **heterotrophs** in the benthos.

