



LIMNOLOGY 12

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Potamology (The study of rivers)

- A **river** is a natural flowing water usually freshwater in a channel, flowing towards a sea or a lake, or another river.

River Sources (headwaters)

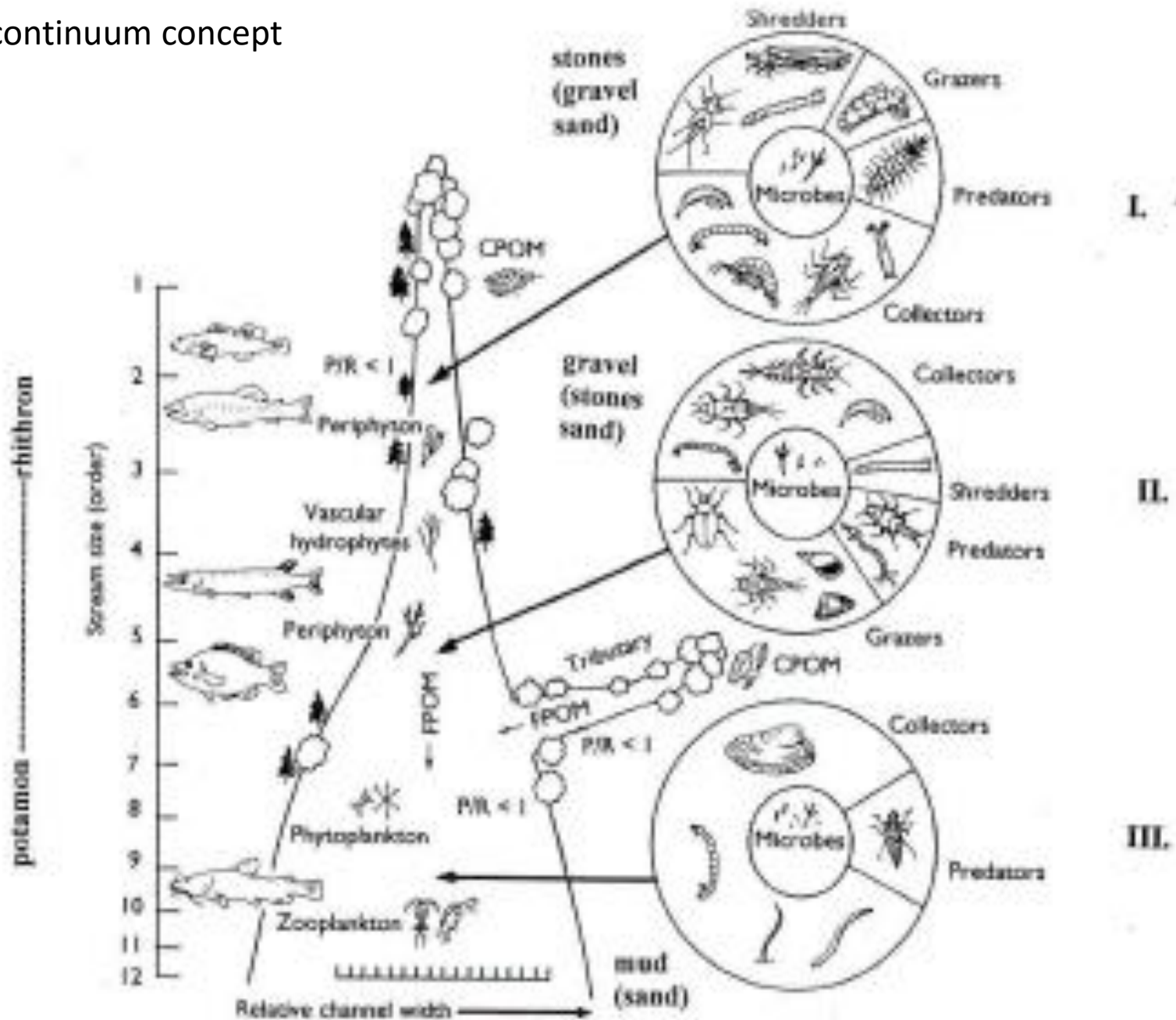
- Sometimes the source of the most remote tributary may be in an area that is more marsh-like source.
- The furthest stream is also often called the **headstream**. Headwaters are often small streams with cool waters because of shade and recently melted ice or snow. They may also be **glacial headwaters**, waters formed by the melting of ice
- Headwater areas are the upstream areas of a watershed, as opposed to the outflow or discharge of a watershed.



The zonation of rivers

- **Epipotamon** (The *crenon* is the uppermost zone at the source of the river) These areas have low temperatures, reduced oxygen content and slow moving water.
- **Mezopotamon** (The *rhithron* is the upstream portion of the river that follows the crenon. It has relatively cool temperatures, high oxygen levels, and fast, turbulent, swift flow)
- **Hipopotamon The reach of a lake or sea** (The *potamon* is the remaining downstream stretch of river. It has warmer temperatures, lower oxygen levels, slow flow and sandier bottoms)

River continuum concept



Stahler stream order



- First Order
- Second Order
- Third Order
- Fourth Order