THE INHABITANTS OF THE LITLE POND

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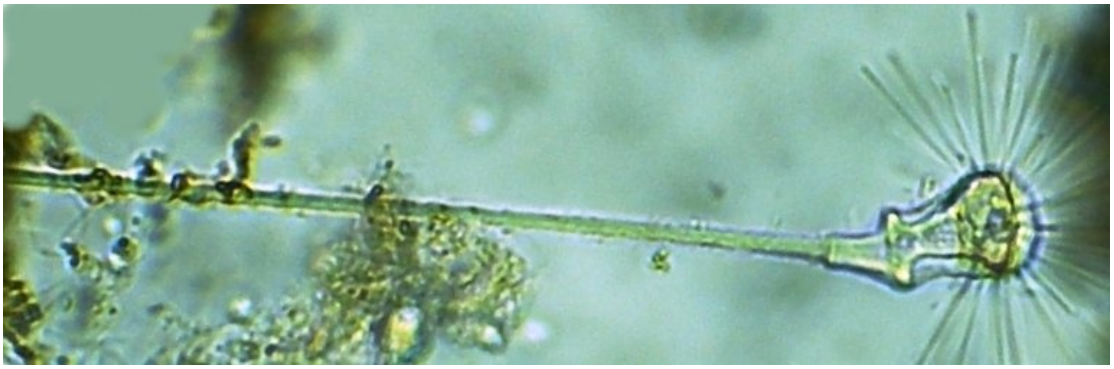
Often our activities unrelated to microscopy can lead us to make observations that are as unexpected as they are interesting. This can be during a rest in a park, an afternoon stroll in the region, a visit to a garden center, or... an invitation to visit friends who have a fish pond.

It is this last case that will serve to illustrate an exploration of the inhabitants of this basin and show that it is not always useful to look far; I made these images quickly and they are not optimized, but what is important is to see the variety of organisms, each of which could merit several hours of observation.

This photo shows part of the pond, 80 cm by 2 metres and 60 cm deep, filled with water lilies and a few aquatic plants. *(Not the « water lily pond » pictured by Claude Monet but not far to art too! because the RAKU sphere in the foreground wich is the work of my wife, and the pond belongs to friends who lend us their gas oven for these raku firings outside their house)*

So between two firings, a small sample of a few milliliters is taken by scraping the walls of the pond, and the underside of the water lily leaves (avoiding the koi carp!) Then is brought home and here is what we can observe there: A suctoria: with its tentacles deployed



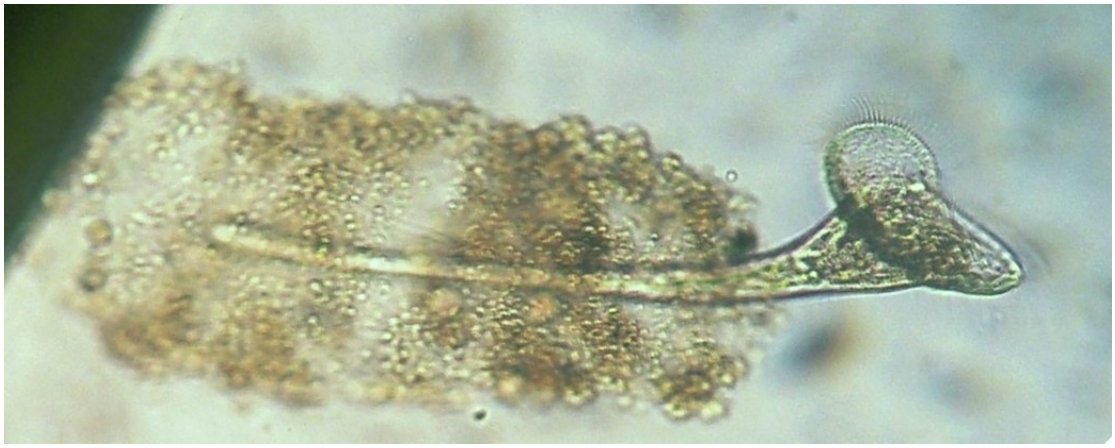
A rotifer ... :

….Who seems in a hurry to go and find his friends under the water lily leaf!:

Another rotifer probably P*tygura*, which builds a lodge with its fecal pellets: (we also see a contracted vorticella on the right)

Another rarer rotifer: *Collotheca* with an egg: the long filaments that allow it to catch its food like a net, are not visible in the image. There were several in the sample

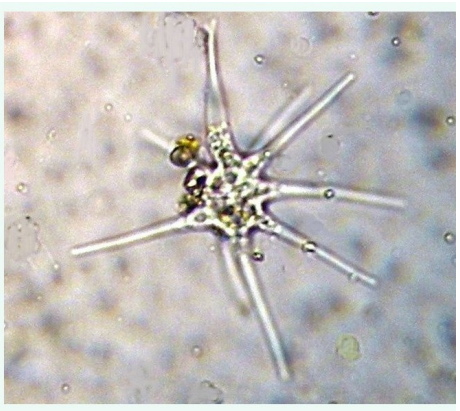
Another protozoan: stentor which produced (or reused?) a lodge... unless it was a rotifer ! (There were several stentors swimming into the sample)



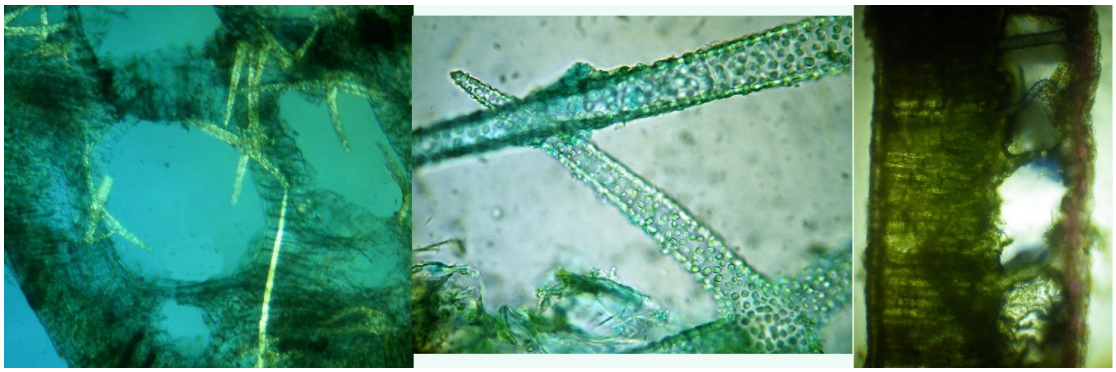
Two desmids ; *closterium* and *scenedesmus*

A planarian seen in dark field: note the eyespots on the right

A theca amoeba: *arcella* on the left and a free amoeba in water which takes this star shape.



And finally a quick view of a section of a water lily stem: on the left in polarized light we can clearly see the air-containing gaps that allow it to float as well as the shiny sclerites. In the middle, a close-up of the sclerites. On the right, a section of the leaf: the epidermis is on the left of the image and we can also see the air gaps on the underside that allow the leaf to float



There were also some euglenas in the sample but not many diatoms...

Here is a quick observation (when you come back from the RAKU session – don't forget than the pieces come out of the oven at 1000 degrees – and at a distance more than 100 km from home, you have some other priorities!): you should not keep the sample as is for more than 24 hours because many species can disappear or be eaten by others.

As soon as possible, you can separate interesting specimens with a micropipette and, why not, try to cultivate them in an appropriate environment: for this purpose, take enough water from the sampling location in addition to the sample itself if you want to make culture. Indeed, in this case, 100 km away, the composition of local waters is very different from my region with calcareous terrain to the first one with granitic terrain.

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