

DIY POND HABITAT...

I am blessed with a small country house that was bought nearly two years ago. The house suits me fine; it's big enough, and so is the ground it's built on. Nearby are several parks and nature reserves that can be reached within an hour's drive at most. But one thing that is lacking is water... By that, I mean a natural source of water within reach. I have always loved water, be it ponds, rivers, or even the seashore, which I can also reach within minutes. But I wanted something even more accessible, like a pond in my backyard...

So I came to the decision of digging my own little pond, one that would hopefully attract aquatic insects, and maybe a frog or two. On top of it, a pond can be full of interesting microscopic life forms. Here is the account of my latest adventure!

Mid-April: Digging starts. There is still a chill in the air, but the snow is mostly gone. The pond will be situated at the back end of my lot. Experts say that ponds should be dug well away from trees, to avoid leaves falling in them, but I don't have a choice: there are trees all around my property and with the wind that blows around here, leaves are bound to fall in the pond sooner rather than later. At worst, I can always clean them out every now and then and throw them in the compost bin.

The hole was dug to make the pond about a meter deep, with a shelf on three sides where I might eventually place containers with aquatic plants in proper soil. Once the digging was done, I used a line level to make sure that the edges were all at the same height. An overflow is also dug at the end of it; the excess water is to be evacuated in a ditch behind the lot.

It took a few days, on and off, to dig the hole, then came the next step. A word to the wise, don't ever try this on a windy day... On a day warm enough to work outside, I laid a geotextile layer as a protection against rocks. In some places, there are two, if not three, layers. Above that came the waterproof lining. I would have preferred a black lining, but none were available in the needed size. So grey it is; hopefully, green algae may grow on its surface. At the very least, I plan to drop a layer of sand at the bottom.



© Christian Autotte

The first digging in late April, with snow in the



© Christian Autotte

The hole was dug with two levels.



The hole was then lined with geotextile...



© Christian Autotte

Which was followed by a waterproof liner.

With the liner in place, I quickly buried the edge all around, also placing some stones to prevent the wind from lifting the liner. As an extra protection against the blowing wind, I filled the deepest part of the pond with collected rain water. A rain barrel (to the right of the pictures) has been rigged to transfer its overflow to the pond.

As luck would have it, I finished installing the lining at the beginning of a dry spell...

That dry spell would have serious consequences for the province. Hundreds of forest fires burned thousands of square kilometres, forcing entire cities to be evacuated as preventive measures. Hundreds of houses and cottages were lost. In June the rain finally came and helped firefighters (some coming from as far as New Zealand, Costa Rica, and France) take control of the situation. As I write these lines, in mid-July, some of those fires are still out of control. By mid-July, 3.3 million hectares have been affected (that's 33000 square km). That's more in this year than the last ten years put together...

It took well over a month for the pond to fill up. As expected once the water was high enough, I had to make some adjustments to both the inflow and outflow in order to bring the water level centimetres below the wanted edge of the pond. Some soil was blown in the pond and coloured it, hiding the grey liner. By then, I had started to collect rocks to line the edge. I also sowed the surroundings of the pond with wildflower seeds, even though Mother Nature had already started some planting of her own.

With the stones in place and the water level up, the liner all but disappears.



Almost full...



Even before completion, I started to see diving beetles, whirligig beetles, water striders, and other insects that moved in. Birds are also regular visitors; I have seen crows and finches step down on the rocks to get a drink. Swallows that nest in a bird house mounted on the shed don't even bother to land when they need a drink: they gulp a beakful on the wing...

No frogs yet... I may tip the scale in my favour by introducing some tadpoles from another pond.



© Christian Autotte

By mid-July, the pond was full and operational. A few days of heavy rain set the water overflowing as it should; again, I did have to make some minor adjustment by digging the overflow gutter a little deeper and steeper.

Every now and then, I skim the water surface to remove floating willow leaves, but inevitably, some of them eventually sink to the bottom. It should make a very natural habitat for all kinds of critters. Time to go fishing...

The very first sample was very encouraging. Lots of microorganisms were swimming about, the kind that needs a flash to stop their motion. I did not try to identify them yet, but one of them is something I had not seen in years: Heliozoa, the sun animalcule. The last time I saw one was 13 years ago! Now that is a very favourable omen!



© Christian Autotte

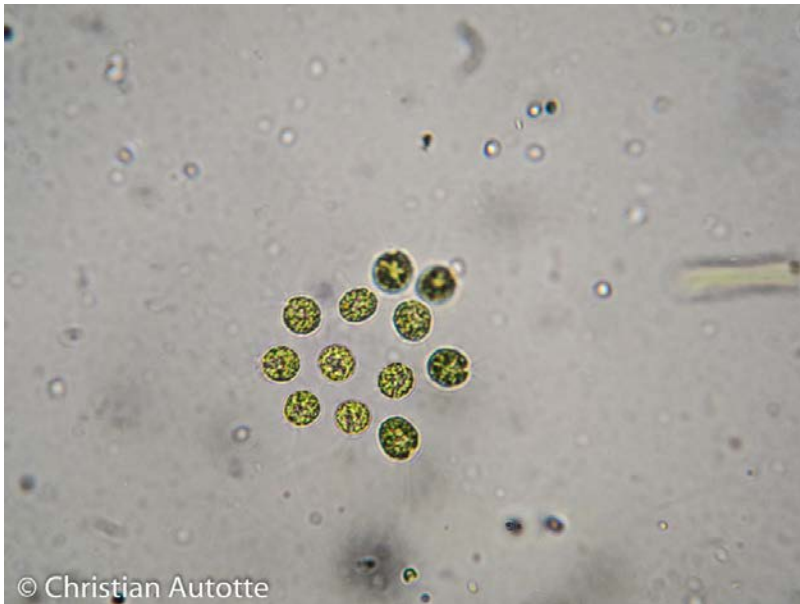


© Christian Autotte



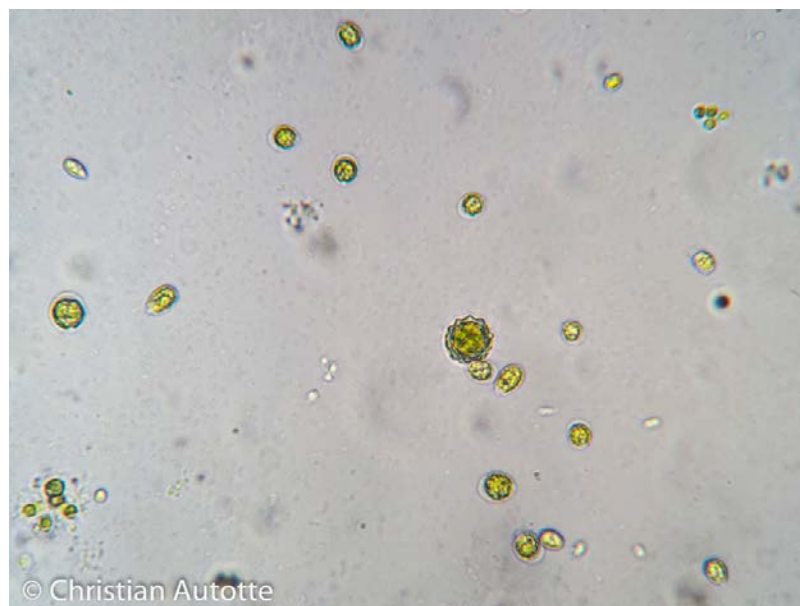
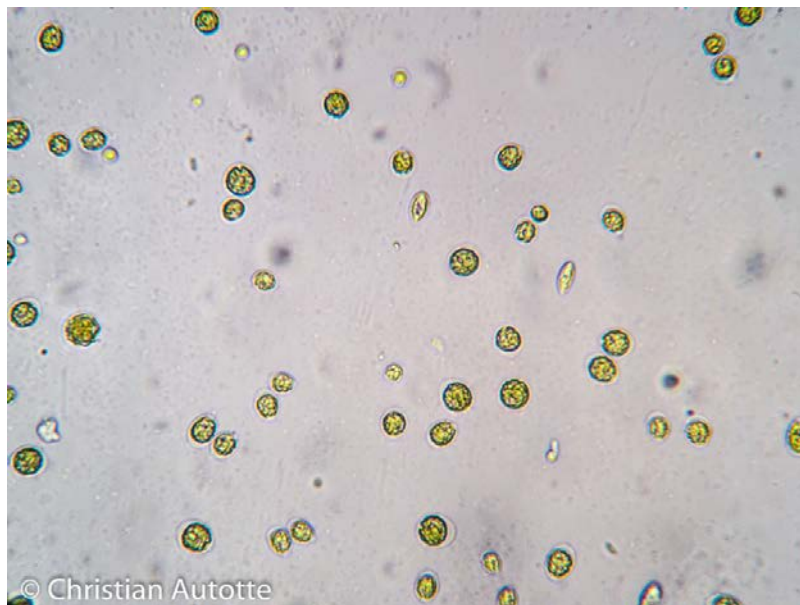
© Christian Autotte

(All images at 400x)



I also spotted several species of algae, which is not surprising as they can colonize any pond or water vessel left in the open for any length of time.

Time is short right now, as I am also very busy with my telescope (another past time of mine...). But judging from these preliminary explorations, the pond should prove itself to be a very interesting habitat for both macro and microphotography. Chances are, I will have more reasons to write about it in the future...



Comments to the author Christian Autotte are welcomed, email: [cautotte.214 AT gmail DOT com](mailto:cautotte.214@gmail.com)
Published in the August 2023 issue of Micscape magazine.
www.micscape.org