

I'd like the prawns returning into the river

The Mayor arrives late, wearing work clothes; he looks like someone who is not afraid to get his hands dirty: "Sorry, we had an urgency."

"What happened?" A very worried face.

"Another water pollution." A low, disconsolate look.

We have reached an important point in our speleological research project: we're ready to present the results on the territory. We asked for a meeting in the Town Hall with the municipal administrators; we are welcomed with interest. We have travelled far and wide in this karst valley, bringing home mud, exhausted carbide and strained but happy cavers, intrigued to be back soon.

Now we introduce ourselves to the community: we want to propose a free access conference open to the people of this small town, to let them know us and our activities; above all the underground part of this valley.

Some of us are very young, speleologists made in the field, without the reverential fear, but with the frankness of youth, that allows to dare more with those one is facing, who finally end up believing in your enthusiasm.

The news of the sudden pollution leaves us troubled, this is where we meet the Mayor.

"Tonight we come at the right time, I guess unfortunately."

"This is not the first time that happens. It seems that today they have discharged some washing water into a small tributary, but it is not well known what kind of substance it is. But let's come to us: tell us, dear ones." A friendly tone, we like it.

"We are already in the heart of the subject, Mr. Mayor. Thanks for the hospitality, first of all. "

The councillor for cultural activities already knows us, but we introduce ourselves better.

Speleology is not a sport: first of all it is exploration, documentation with topographical surveys along with recording of caves. We explain that we would like to present the first results in a public conference.

"It is an aspect of our territory that the population knows little, or not at all. I think it's interesting, and I would say crucial, given what happened tonight." The councillor has already decided.

But underground, there's much more to it than you can imagine and, above all, it's damn delicate.

"We didn't know there were so many caves, and almost all in our municipality."

Research is still in progress, we have to go to the upper valley, where no one has ever explored.

Amazement and interest of the administrators. Good. Here we are. We hit the target (we hit the nail on the head), we will hold the conference and advertise it to the maximum. Many inhabitants of the valley know us already, they have shown us where the caves are, and have listened to the reports of the explorations while we changed clothes, first around the cars and later in their homes, where we often were warmly welcomed.

A delicate world, it was said. Above all not a world in its own right, separated from the one above and visited only by those who have the insane passion to go inside spending their free time for thirst for adventure.

"In your valley, in at least ten cavities, there is the presence of groundwater: sinkholes, runoffs inside, springs. Yes, the resurgence along the way, do you know? The level rises up to four meters, the water comes out and goes directly into the stream."

You can call it a river, but at the beginning it is just a stream, which then goes into another stream and into a river, a big one, sacred, important, turquoise as no other you have seen before, eventually into the sea. All in a few tens kilometers, forty, fifty at most.

You don't know where the water of that mysterious resurgence comes from. Well, from the mountains around there, but where exactly? If I poured water on the ground here or there, how could I be sure that it would come out from that karst source, which hasn't been explored, just because you can't walk inside?

There is a cave fifty meters deep with a water flow at the bottom and, outside, three springs nearby, lower, but the tracings of the waters made inside didn't give any results. Nothing, no one knows where it comes from. Which means that where the water goes is still a mystery and therefore a potential greater risk.

"If polluted waters or other substances end up in an active cave (that is when the water is still flowing, otherwise it is called fossil), or if they were spilled on the land near the entrance, (you can) just imagine the results. Indeed, the risk is equally high in any point of the valley: we do not know the groundwater circulation and perhaps we will never be able to know it even with the most studied complexes."

Again, frost and concern among the municipal administrators.

"The matter is serious and speleologists are aware of it. Thanks to these girls and boys we realize it too. I felt that their activity was important, but I didn't think they would take us that far."

The problem is that many drinking springs are indeed of karst origin: in a nutshell, the water that comes out of a cave is intercepted directly and conveyed into the pipes. As for the side intake of the town's aqueduct, it is a cave from which drinking water comes out.

"I got it. It is important, dear speleologists, that you tell all of us these things, and very soon."

The date for the conference has been set, the bottle is uncorked. A red wine with a hint of sparkling, an excellence. Sublime ... without exaggeration.

I'm done for today, that's it. I'll wash my hands and have a drink. Tomorrow I'll empty what remains of the fuel tank and eliminate it permanently. Yesterday I saw people looking into the stream, there was also the mayor and then arrived the Forest Service.

I asked my neighbor: someone must have poured polluting liquids into the stream, maybe it was him, he lives right up there. But I'm not that foolish. All you have to do is put the waste underground, there is a hole in the woods nearby, a well cave: towards the diesel fuel left in there and we forget about it. If the diesel goes underground, it stops there, does not pollute and is already buried.

I will do so. Tomorrow, however: enough for today.

A tractor stops: "Hello! How are you? Are you coming for a drink?"

"Tonight there is a conference, they will talk about our valley, people hiking, they shot a documentary about our mountains. I am going, for once in a while when it comes to our land..."

OK, he convinces me. I'll go there too, maybe just to be in good company doing something different than usual.

The town hall is packed with people. The mayor, the councillors and the speakers: it is not just about hiking and mountain but caves. They say that there are at least sixty of them in the valley, many have been explored, even large ones, with wonderful stalactites.

Someone asks a question: "If there were a spill of pollutants on the surface of the soil, I would think that the soil could work as a filter for the pollutants that leach: passing through, the water could be purified. The problem always remains, but at least the concentration of the toxic substances is reduced."

The speleologist explains that this is not the case: "In karst areas, like your (our) valley, this does not happen. An underground cavity is a direct pipeline: the water can cover huge distances and gradients without being filtered at all. It's like an aqueduct pipe: you open the tap and drink it directly."

Clear, simple words. What if this happens also for the cave near my wood? It would be a bit like flushing into a stream directly, in the open air, and who knows where it would end up.

But no, it would be a few liters, everyone has always done it, what do you want to happen, right in that well so small, where no one will ever enter ... Here, right now they are projecting the photo of that cave ... I recognize it! They say they have been in it, the bottom is flooded, the water level rises and falls. I didn't know it.

Now their geologist speaks: "There is a direct connection to the well-known source of the valley floor, near the former tavern."

Now I have a guilty conscience. I dodged a bullet. I realized what the source is, it forms a real lake when it rains.

I remember that many years ago there were many more fish in that river, even shrimps, that we used to go fishing at night, with our bare hands. You have to be quick to get them ... little is enough, they say, little is enough to pollute. Once there was a fish mortality, what a pain to see the river like this. I will call someone for diesel, I heard there should be a company that deals with the disposal of hazardous waste, they will certainly solve the tank problem for me.

Eventually some wine bottles will be opened. I take a glass and go to meet the speleologists, I'm curious about what they do.

My neighbor is no longer here: he left in a hurry at the end of the conference, without saying goodbye to anyone. Strange, he likes drinks and company. Maybe he knows something about water pollution? I guess he soon will have visitors in uniform.

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