Gas and smoke still a threat to Camphill School

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Camphill children 'thank you for the food we eat.' Photo: Taylum Meyer

early four months after devastating fires raged through several communities in the Overstrand, most people have shaken themselves free of the ash and begun to rebuild their lives. Not so Camphill School in the Hemel-en-Aarde Valley. After the miraculous survival of most of the buildings and the euphoria which followed, gradually another more sinister threat emerged. The fire had not been extinguished; it had gone underground and continued to smoulder.

This had two disastrous effects: it was located in a unique palmiet wetland in and adjacent to the Onrus riverbed and if destroyed, it would have a devastating impact on the ecology of the region, including the quality of the water flowing into the estuary; and secondly, the smothering clouds of smoke and toxic gases emitted from the smoulder made it impossible from a health point of view, for the pupils and staff to return to the school.

In the intervening months, environmental, wetland and fire-fighting specialists at the municipal, provincial and national level have conducted numerous on-site tests and investigated a variety of options for the satisfactory resolution of the problem. Because of the extraordinarily high ground temperature, it became clear that this would be both a complicated and very dangerous intervention. While they were searching for an answer to this problem, urgent steps needed to be taken to prevent it from spreading either up or down the river system and destroying even more of the wetland.

Peat fire statistics:

- · The Peatland covers 33 ha and is estimated to be 12 000 years old;
- · The fire is burning in a 9 ha area which is covered with aliens;
- · The peat is 7.25 m deep, although in the central channel it is deeper:
- · The depth of the fire varies because of the eroded state of that part of the wetland, one of the peat ore sites measured heat at 3.9 m under the ground;
- · The ground above the fire fractured into honeycomb cracks with strong-smelling gas consisting of sulphates, carbon dioxide and methane seeping out;
- The baseline soil temperature in the area is 18°C; on the path next to the road 38°C was measured; further into the site 128°C was measure and temperatures at the centre of the fire have been recorded at 330°C;
- · The recent heavy rains have not succeeded in increasing the water table;
- The previous time the peatland burnt it took 8 months, without intervention, before the fire was extinguished by rain;
- Working on Fire have developed a 'spike' tool which will drill a vertical hole into the burning substructure. A pipe connected to a hose will be sunk and water pumped in so that the peat can be flooded from the bottom up.

From an organisational point of view, something equally urgent had to done about the pupils' education, and accommodation for the boarders and their support staff. Jeanne-Marie Botha, the school principal managed to negotiate the rental of the Sandbaai Hall for the children's schooling and two houses to accommodate the boarders, house parents and volunteers. Whilst not ideal, the teachers and learners manfully adapted to the difficult circumstances and got on with the job.

However, unexpectedly a crisis developed while Jeanne-Marie was in the UK attending a conference of the Association of Camphill Communities of the UK and Ireland with which the Hermanus School is affiliated. When she returned just before Easter, she was confronted with the news that the Sandbaai Hall would no longer be able to host the school – as from the beginning of May! Intellectually disabled children do not adapt easily to change or the disruption to their routine. There could be no question of their being able to return to the school premises where the air pollution had deteriorated even more, so where to go now with 60-odd children from age 6 to 18?



Camphill pupils at work in Sandbaai hall where they have been since January but will be leaving this week. Photo: Taylum Meyer

The word was put out and shortly before going to print, we were informed by Jeanne-Marie that the School had been overwhelmed by the many churches and other facilities, like the Volmoed Retreat Centre and Bosko School which had offered them accommodation. She also wanted to express her gratitude to Franklin Hamman, Chairman of the Hermanus Old Boys' Club who has been throwing himself body and soul into helping find suitable premises. They have until after the 1 May public holiday to decide on the best option and to undertake their second great trek.

At roughly the same time as this crisis was erupting, Jeanne-Marie was informed by Working on Fire that 25 of their firefighters would be moving into one of the boarding houses at the School to start work on dousing the fire. According to Liezl de Villiers of the Environmental Section of the municipality, this organisation has been contracted for an estimated 50 days to complete the task. They will be using a technique never used in this country before, although it was developed by South African fire specialist Martin Bolton. It has been applied with success overseas, but it is not an exact science and it is difficult to know how long the process will take under these specific conditions. It is also impossible to know what fumes will be released once they start probing below the surface.

Thermal imaging was done on site last week, but the comparative analysis against previous images is not yet available. However, it would appear that the news is not good. Apparently, the wetland could have been destroyed to a depth of about 4 metres (a possible exacerbation of damage caused by earlier fires). From visual observation, it would also seem that thanks to measures the experts took earlier, the fire has been prevented from spreading up or down the river, but it does seem to have spread sideways and now covers an area of about 9 ha.

Liezl makes the point that the most urgent need is to douse the fire so that Camphill School can safely re-occupy its premises, but after that, the critically important and time-consuming process of rehabilitating the wetland will have to begin. Although the municipality and Working on Fire are managing the fire fighting exercise, when it comes to the rehabilitation process, there are many more players in the game - from the landowners, wetland and environmental specialists, to government departments at national, provincial and local levels. This will involve red tape galore and the navigation of numerous legal constraints. And then, of course, there's the small matter of who will pay for this inordinately expensive process...

One thing is certain - this will be a lengthy exercise (perhaps as long as a year, possibly longer). There is no doubt, though, that rehabilitation of this delicate eco-system must take place before it degrades even further. Its neglect will have long-term consequences both in terms of the quantity and quality of the water in the Onrus River (and ultimately the tourism potential of the area), but also on the survival of its finely balanced faunal and floral systems.

Key to ensuring that the rehabilitation takes place in the shortest possible time frame is the sustained pressure that the local community can place on the authorities through letters of support and campaigns. The Onrus River Estuary Forum may be the most suitable organisation to rally such support, believes Liezl.

As far as the dousing of the fire is concerned, this week will be critical. Only once the fire fighting team have probed the surface and started implementing their operational plan will they have an idea of whether it will work or not, and if so, how long it might take. The Village NEWS will continue to track and report on progress with this project and the successful relocation of the Camphill children.