

## SETTING THE RECORD STRAIGHT #6

We hope that our last 4 postings have clearly demonstrated:

- (1) that amphibian populations on the sports centre are very low, especially where frogs and toads are concerned
- (2) that the design of the boating lake makes it very unsuitable as a successful amphibian breeding site
- (3) that the design of the boating lake is especially unsuitable for toads
- (4) that a purpose built pond complex, especially designed with amphibians and especially toads in mind has been created close by and already adopted by newts, toads and frogs.

So what of the boating lake? Take it as a structure; it was built from concrete in the late 1930's when engineering standards were not what they are today. The floor is cracked in many places and both leaks water when it is filled, and flushes out soil from underneath when the surrounding ground is saturated and the water table high (as occurred over last winter). It has partially collapsed in the NW corner, where a large puddle accumulates after rain. When contractors were patching the holes drilled by the EA, they commented to us how surprisingly thin the bottom was. We recently posted video of air bubbles escaping up through the lake bed from underneath where void spaces have been created through subsoil collapse. The side walls are also severely cracked and leaking. This winter you could see water pouring out. The joint between the side walls and the capping is also cracked and leaks water. Critically, the walls are also now collapsing in at significant angles, on both the long edges. One of the attached photos show the eastern edge, the western edge is actually worse. The simple fact is that it is 75 years old and time has taken its toll and it is now completely worn out and breaking apart. We very much doubt if Sir Sydney Kimber would have expected it to still be around today.

Eighteen months ago, FoSSC contacted a firm which specialises in the repair and restoration of concrete ponds and asked for their professional opinion as to the options. We specifically asked "Given the state of the lake walls, could it be repaired to structural integrity and a watertight condition by buttressing the walls throughout and re-skimming the bottom?" and the answer was "Short and sweet this – No. Bad foundations make for bad superstructure." In their opinion it would effectively need complete rebuilding with deeper foundations, inside the existing walls, a very heavy duty liner on top of the existing lake bed and a 2.5-3 inch thick concrete screed on top.

Therefore talk of repair or restoration is, we believe, nonsense, complete rebuild would be required. We also asked the experts about estimated lifespan of a rebuild and estimated costs

Estimated lifetime –around 60 years

.... Very rough estimated cost – likely around £400,000 simply for the lake engineering works. The entire surround would also have to be rebuilt and given that redoing the small section of paving at the NE end cost the best part of £30,000, and then there is all the street furniture, landscaping, etc. etc. The likely overall budget would be in excess of £1,000,000.

Even if that £1,000,000 could be found to rebuild, what use would it be? It would still be totally unsuitable for amphibians, it would also be too shallow for the current generation of model racing yachts and, given its location and exposed aspect, it would suffer very significant evaporative losses (estimate 15-20mm per day in summer – with a surface area of some 3,400 sq m that represents a daily summer top up of over 50,000 litres from evaporation alone! Where would that be replaced from?

Others have made reference to a scheme in Enfield Park where an old, concrete model boating lake was in a similar state of decay. Because they could not find any funding source willing to pay for rebuilding, they used industrial quantities of sealant to try to fill the worst of the cracks. The lake still leaks and loses water and their scheme only works because it is continuously topped up by gravity feed from a large river nearby (the River Lee). The feeding stream has been landscaped to create an attractive water feature in its own right but that simply isn't an option for the boating lake because there isn't a large river close by from which to replace the unknown quantity still lost through leakage or that lost from evaporation.

What might the costs be if a rebuilt site were to be used as a commercial boating lake?

Here are some "back of the envelope" calculations assuming total rebuild and operation as a commercial boating lake - 7 days a week for 6 months of the year (April through September, 6 hours hire per day (plus 1 hour setup and 1 hour close down per day) and 20 boats for hire. The core economic assumption has to be that over the 60 year lifetime the entire building and running costs have to be collected in order to break even and accumulate sufficient funds to rebuild again.

Rebuild cost: £1,000,000

20 boats: £1,000 each, replaced every 10 years = £120,000

Staffing: (absolute minimum based on single person operation at any time, 1.4 x salary (7 day) @£20,000 per year inc. NI etc. x 0.5 year operation x 60 years): £840,000

Therefore, absolute bare minimum to recoup over 60 year period = £1,960,000 and this excludes site maintenance, insurance, tax, ancillary safety equipment, extra staff, weekend casual staff, inflation, safety inspections, possible water treatment etc. etc. etc. and so is actually a gross underestimate.

Assume average usage levels of 25% during week and 75% at weekends. Weekend : 15 boats x 26 weeks x 2 days x 6 hours x 60 years = 280,800 hours. Week: 5 boats x 26 weeks x 5 days x 6 hours x 60 years = 234,000 hours. Total hire hours = 514,800 (probably vastly over optimistic)

Therefore absolute minimum hire charge = £1,960,000 (minimum) / 514,800 (maximum) plus VAT – approx. £4.60 per hour absolute minimum.

However, there is then the great British weather to factor into the equation. Of the 183 days from April to September, it rains on an average 89 days (<http://www.holiday-weather.com/southampton/averages/#chart-head-precipitation>) and who wants to be on a boating lake in the rain? Therefore hire is only likely on the average 94 dry days over this period. Absolute minimum hire charge to mitigate for lost days then jumps to £9 per hour. If 2 staff are needed, total costs jump to £2,800,000 and absolute minimum hire charge jumps to £12.70 per hour. When one factors in all the additional running costs mentioned above and if one is both honest and realistic about the true appeal to the modern generation of a boating lake in this setting, and the resulting likely demand that needs to pay those costs, we believe that realistic hire costs would have to be set at a level that no one would be prepared to pay. (Oh, and by the way, there is absolutely no profit margin in the above either!). Therefore FoSSC simply does not believe in the financial viability of a commercial boating lake on the Sports Centre.

So, it is clearly not viable as a successful amphibian breeding site and it is clearly not viable as a commercial boating lake either! And please, everyone, also be clear, a wildlife pond would require a completely different management regime to a boating lake, it can't be both! –a boating lake may well require water treatment to maintain water quality – see the attached photo of the boating lake on Hastings seafront – it really is that blue through chemical treatment. Interesting also that on a bright, sunny day last week, when lots of people were out on the seafront, walking, taking rides on the miniature railway or playing crazy golf on their superb and immaculate courses, the boating lake was closed for business!

What then is the point? Surely it would be far better to use this space for something that both has genuine widespread appeal to all ages, both sexes and all abilities all year round and is economically viable?

In the next posting of this series we will consider recreational use of the Sports Centre and representation of different user groups and hopefully dispel a few more myths that are currently doing the rounds.

### Accompanying images



water seeping up through cracks in the lake bed



water seeping in through cracks between walls and capping



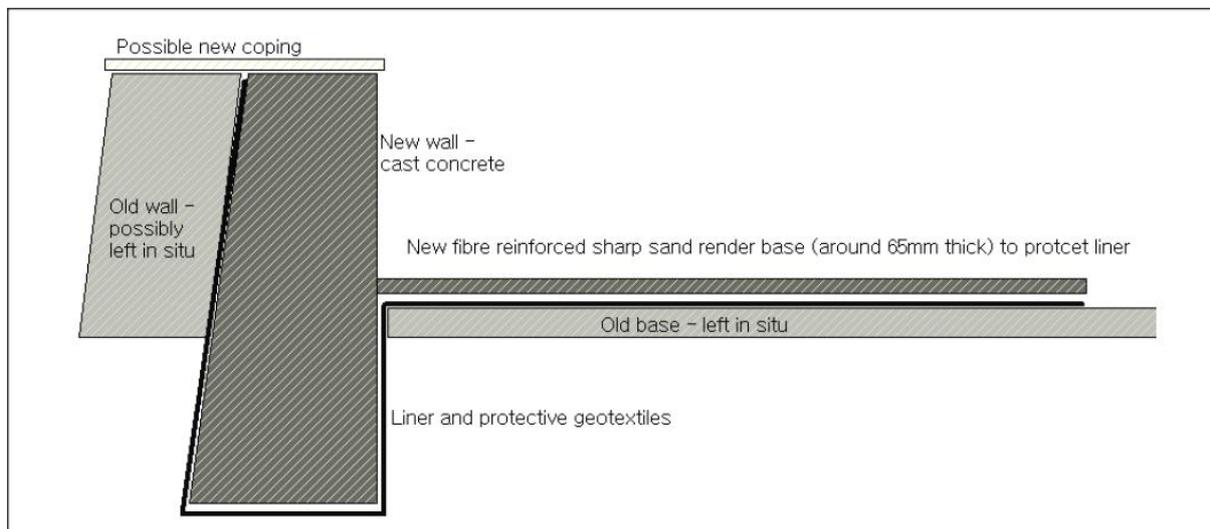
cracked side walls



puddle in collapsed area in NE corner



side walls sloping in



rebuild details

Boating Lake, Hastings Seafront. 14/4/2016  
it really is that colour due to chemical treatment



chemical treatment of commercial boating lake – not compatible with wildlife.