

Mike Carter – George Yourdi and the Elan Valley Dams. 04-07-16

Mike Carter made a welcome return visit to the History Group, this time to talk about George Yourdi, the Engineer behind the Elan Valley Dams, the workers' villages and the construction of the dams. In a presentation which included archive material, photographs, both contemporary to the construction and current, documents and maps among other evidence, Mike took us from the beginning of the Scheme through to the Royal Opening of the Dams, a timescale of thirteen years, of which the actual build took eleven years.

Mike began by telling the Group that at his first introduction to the Elan Valley Dams he was “gobsmacked by the utter scale, beauty and peace of the area” and it has since become a favourite place to visit, and as he himself said 'It's like going home'. He presented photographs that he had taken of the area, comparing and contrasting them with contemporary photographs taken during the years before, during and after the building scheme.

The Scheme was initiated by the dire social conditions that were prevalent in Birmingham during the 1880's and 1890's, when in an era of growing industrialisation the problems in Birmingham were

- Not enough water for the population.
- A growing population.
- Growing industrialisation.
- Diseases eg cholera.

Sir Thomas Martineau – the Chairman of Birmingham Water Committee – realised that clean water would eliminate a large proportion of the social problems, but the scale of the solution was enormous. He enlisted the help of James Mansergh, a Civil Engineer, who in turn brought in George Yourdi, the Principal Resident Engineer, with whom he had previously worked.



During the whole of the project Yourdi lived on site, in the nearby house Nant Gwyllt, which later was submerged when the Reservoirs flooded. The house was immortalised as 'The House Under the Water' in the novel by Francis Brett Young.

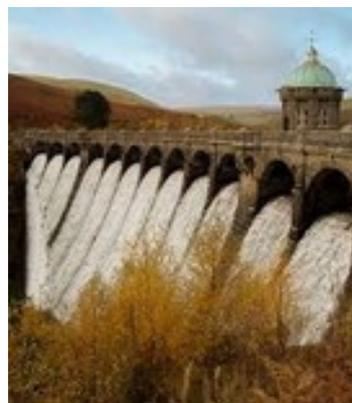
Yourdi's task was tremendous. He masterminded and supervised:

- The building of dams and reservoirs.
- Creating roads and railways. The 33 miles of track were built on standard gauge and linked in with the mainline railway network. The railway consisted of 12 locos, 100 trucks, and 6 passenger coaches.
- Housing the workforce. The Workforce village contained houses, a hospital, a canteen, a schoolroom, offices and a dosshouse, where prospective workers were cleaned down before they could be employed. Originally the workers were housed in wooden huts in the Elan Model Village, but stone houses were constructed in 1906 and they are still standing in 2016 – Mike produced recent photographic evidence of them.
- Arranging for quarrying and workshops.
- Replacing the church and moving the burial ground.

Yourdi was a thoughtful and solicitous planner. He was concerned for the health, safety and welfare of the workforce and he was involved in putting together the domestic, social and health rules for the site.

The scale of the engineering was huge. All the water is fed by gravity to Birmingham, a distance of 74 miles. It takes 2 days for the water to fall from the Elan Valley Dams to Birmingham. The fall is 1:2,300 over the 74 miles and is a fall of 170'. It is all gravity fed with no pumps. The system is still in use today and the aqueduct runs locally through the Wyre Forest on its way to Birmingham.

There are four dams on the river Elan; Craig Goch, Pen-y-garreg, Garreg Ddu, and Caban Coch.



The presentation was very well received by the members of the History Group. Mike spoke to us in an approachable manner, as to friends, rather than in an overly academic style. The Presentation included excellent archive photos, personal reminiscences and helpful diagrams and facts, and a recommended bibliography. The Chairman of the History Group, Geoff Bayley summed up the appreciation of all the members by saying that the talk was outstanding and the research was one of the best he had ever encountered.

Heidy Hague