

David J. Burdon (1914- 1987)

David Burdon was an exceptionally gifted and inspirational man. His career in hydrogeology extended from 1949 until 1987. Working in over fifty countries and with contacts in many others he was truly a citizen of the world. His working life spanned that period which saw the growth and development of hydrogeology into a widely respected and recognised field of science. A man of wide interests, he was an excellent communicator and ever ready to share his enthusiasm and knowledge with others.

David Burdon was born in 1914 in Buttevant, Co Cork, Ireland, the son of William and Helen Burdon. His father was a bank manager and his uncle parish priest in Buttevant. In 1926 he went to Clongowes Wood College, a secondary boarding school run by the Jesuits, near Dublin. There he was particularly interested in English and history and also received a grounding in Greek and Latin. From 1932-1935 he attended University College Dublin and obtained degrees in Civil Engineering and Science (Geology and Mathematical Physics). In 1935-1937 he went to the Camborne School of Mines, where he obtained an honours Associateship.

In 1938- 1947 he served as a surveyor and geologist in the Kolar Gold Field in South India. In 1947 he returned to Europe and prepared two theses, which led in 1949 to the award of a Ph.D from the University of London on “The Southwestern Termination of the Leinster Granite” and a M.Sc from the National University of Ireland on “The Lode Formation of the Kolar Goldfield”. In 1949 he married Katherine O’Reilly, a member of a well-known Co Louth family. Between 1950 and 1960 they had five children born in Cyprus, Damascus and Athens. Shortly after their marriage David joined the British Colonial Service and was appointed Assistant Water Engineer in Cyprus, where he was in charge of groundwater investigations and development. In 1951 he was seconded part-time to the newly established Geological Survey of Cyprus and undertook geological mapping.

In 1952 David joined the UN Food and Agricultural Organisation (FAO) with whom he was to serve until 1974. From 1952-1960 he was based in Damascus as FAO adviser to the Government of Syria on all aspects of groundwater investigation, development, conservation and use, including legislation, organisation and training. While based in Damascus he also worked in Egypt, Jordan and Saudi Arabia. From 1960-1963 he was in charge of a joint UN and Government of Greece project on karst groundwater in Crete and Kephallonia, while also continuing as a UN consultant in Syria, Egypt, Lebanon and Jordan. In 1962 with S. Mazloum he published a general work on the hydrogeology of the Mediterranean Basin and in 1963 with N.Papakis a handbook on karst hydrogeology. In the same year he was awarded a D.Sc. by the National University of Ireland in recognition for his published works on geology. For eighteen months from early 1963, he was based in the FAO Near East Regional Office, Cairo, serving some fifteen countries on groundwater development. As well as those countries already mentioned he now visited Libya, Iraq, Sudan and Yemen. In late 1964 David Burdon moved to FAO HQ in Rome and was assigned major work in Saudi Arabia. During the next ten years his work with FAO took him to forty-four countries. In 1967 he became chief of the Water Resources Branch in the Land and Water Division of FAO and in 1970 was promoted as consultant hydrogeologist. In the period 1970- 1974 David visited forty-three countries ranging

from Switzerland eastwards to Turkey, Iran, Afghanistan, India, Sri Lanka, Indonesia and Korea. In Africa at this time he worked in Algeria, Egypt, Libya, Sudan, Chad, Senegal, Upper Volta, Kenya, Uganda and Botswana.

In 1974 David retired from his post in FAO and returned to live in his family home Rathclare House, Buttevant. This represented a change of base and emphasis but no slackening in activity. By happy coincidence his home country of Ireland, having just joined the European Community (EC and now EU), was beginning to emerge from decades of economic neglect and lack of development. Groundwater resources, which in Ireland had until then been little considered, were now with EC prompting a topic of increasing interest. Within months of his return to Ireland, David was appointed hydrogeological consultant to the Geological Survey of Ireland and the director of a geological consulting firm, Minerex Ltd, the first Irish company to employ a hydrogeologist. He also continued to act as a consultant for FAO and to attend numerous international technical meetings and conferences on many aspects of groundwater.

He was an enthusiastic supporter of the IAH, and was one of those in 1952 who strongly backed the proposal by Leo Picard to set up the organisation during the 19th International Geological Congress in Alger. For years a member of the Italian Chapter, on his return to Ireland he co-founded the Irish Chapter in 1976 and was elected its first President. He served on a number of IAH specialist Commissions, and was especially active in the work of the Karst Commission. In 1986 David was made an honorary member of IAH.

Besides IAH, he was also a member of another dozen learned societies including: Institution of Mining and Metallurgy, Geological Society of London, Institution of Water Engineers and Scientists, Institution of Geologists, American Water Works Association, American Geophysical Union, American Water Resources Association, Société Géologique de France, Geological Society of Italy and Association of Geoscientists for International Development.

A man of strong moral and religious convictions, David Burdon firmly believed in the importance of water as a vital commodity for the well being of humanity. He liked to quote from the Koran “from water, all things have life”. He repeated on many occasions that the availability of good water usually determined the economic well being of a people and indeed underpinned all great civilisations. He also used argue that it was necessary for a hydrologist to work in the Arid Zone in order to really appreciate the true value of water. He was known to say that all countries were developing countries! His knowledge and awareness of history enabled him in 1982 on his award of the Aberconway Medal by the Institution of Geologists to quote from Bacon, four centuries before “Knowledge is not a coach for the curious spirit, not a terrace for the wandering, nor a tower of state for the proud mind, nor a vantage ground for the haughty, nor a shop for profit or sale, but a storehouse for the glory of God and the endowment of mankind”. It would be hard to better sum up David’s philosophical approach to the application of science! David was meticulous collector of information and his many technical reports are a model of detail and clarity. He could produce reports very rapidly and it was noticeable in his later years how speedily he could produce drafts, working away on his old typewriter.

His return home in 1974 enabled him to see more of his family, spend time on his farm and refurbish his family home. He had time to delve into family history tracing his Burdon ancestry back to the thirteenth century. He was also much interested in local history and involved with local heritage issues.

The death of his wife Katherine in 1986 was a huge loss to him. They had been together for close on four decades and had shared their lives in many different countries. Although he maintained a great deal of activity it would not be long before he was to rejoin her. On return from Libya in September 1987 he was clearly unwell. Throughout his life he had sustained excellent health but now a series of strokes were to confine him to bed. He died on the last day of 1987 and is buried in the local graveyard in Buttevant.

David was a prolific writer, often in collaboration with others. He produced hundreds of technical reports and contributed papers to most of the societies of which he was a member. He had a worldwide view of water resources and his advice on water problems was much in demand and readily given. His legacy is contained in his writings and in the memories of a great many people in the hydrogeological community around the world with whom he came in contact over the years and with whom he left a lasting impression.

In 1989 during the 28th International Geological Congress in Washington DC, the IAH Executive in setting up its new Commission for Developing Countries felt it was fitting to commemorate David by naming this Commission the Burdon Commission.

Bob Aldwell
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*His technical and papers and library were bequeathed to the Geological Survey of Ireland in Dublin, where they may be viewed by appointment.