

OBITUARY

STEPHEN TRUDGILL
11th May 1947 – 18th January 2022



Steve Trudgill, who died aged 74 in January 2022, wrote many books and articles on karst, ecology and nature conservation. Steve, tall, exceptionally thin and with a surreal sense of humour, came to the University of Bristol in 1965 to study Geography with subsidiary Geology. When his request to add Botany to his curriculum was refused, he took Sociology, disliking it at the time but later finding that it contributed much to his own fusion of social and physical geography. His childhood curiosity and wonder at the variety of the natural world never left him and was never subsumed into a narrow scientism.

He belonged to a ‘lucky generation’ who joined UBSS in the 1960s when E K Tratman (‘Trat’) and Oliver Lloyd encouraged students to get involved in scientific studies, digs and original exploration. Steve admired them both and was grateful to Trat especially for his tolerance, kindness and encouragement. Steve progressively integrated his passions for the natural world, painting and poetry into his professional practice as a university teacher of geography, and fused emotion, culture and science into a singular intellectual outlook. The short illness that preceded the publication of his last book *Why Conserve Nature* cut off his life while he still had much to give to the world.

Steve’s introduction to karst and caving came when he volunteered to assist UBSS members Frank Nicholson and Colin High in County Clare, deploying the newly-invented Micro-Erosion Meter¹ to measure surface lowering rates on limestone pavements and in cave streamways. He later wrote, “For some reason I really rather enjoyed the inspiring combination of the physicality and companionship of caving and the cerebral appeal of coming away with measurements to six decimal places. My devotion to field work was firmly instilled in me, leading to many years of dogged measurement in all sorts of conditions.” Although he joined in a few original cave explorations it was through measuring the rates of karst processes in real time that Steve became a pioneer. County Clare was the birthplace of twenty years of work,

¹ Hanna, F.K., 1966. A technique for measuring the rate of erosion of cave passages. Proc. U.B.S.S., 11 (1), 83-86.

across the world elucidating the interactions between rock soil, vegetation, weather and climate that produce the distinctive karst landforms known as lapiaz and karren. He summed it all up in a seminal book² on Limestone Geomorphology, a context in which the special attention Steve gave to the deep notches and lapiaz formed on rocky limestone coasts stood out.

In 1968 he began a PhD under the supervision of David Ingle Smith ('Dingle'). Out of the blue, an opportunity arose for Steve to join a multi-year scientific survey of Aldabara. Using the micro-erosion meter and techniques he invented himself, he showed that the deep notches that characterise Aldabara's coasts were formed by a combination of biotic and chemical processes, direct abrasion by limpets and chitons, and exposure to waves. Alternating between Aldabara and County Clare, Steve identified the same processes producing distinct zones of fretted landforms within the rocky littoral in both. He was the first to show that coastal sea water, long thought to be incapable of dissolving limestone, became undersaturated at night when the addition of carbon dioxide respired by floating algae was no longer outweighed by photosynthesis as it was during the day.

Steve's work on karst went beyond geomorphology, combining it with ecology and soil science in a synthesis that foreshadowed his eclectic approach to conservation issues in his Cambridge years. From his first academic post at the University of Strathclyde he ran trips to Norfolk, noting that students from hilly Scotland did not perceive the subtleties of flat landscapes, which stimulated later ideas on perceptions of Nature. Steve moved to Sheffield University where he remained for twenty years, his interests gradually shifting. As he wrote in 2021, "Even though I had written books on limestone geomorphology and soils it gradually dawned on me that to do further research one had to get funding but karst was not necessarily an area that attracted the money. I therefore used what I had learned from karst research and applied it to work on water quality, especially nitrate leaching – which was very topical and fundable." These decades also saw him researching karst in Jamaica, Australia and New Zealand as well as a renewal of the Aldabra work.

At Sheffield he reached out into new fields that gave rise to books on weathering, solutes and water quality, catchment and land use management, and two editions of his book on Soils and Vegetation. He worked on ecology in Ladakh and Ethiopia, and catchment dynamics in the USA. This was a second period in which the scope of his interests evolved, and he explored what might be termed the cultural ecology of nature conservation in his book *Barriers to a Better Environment* (1990).

This evolution culminated in his move to a Fellowship at Robinson College Cambridge and a house in the village of Hinxton where he spent the last twenty-five years of his life. He wrote that this was a homecoming; he had found two places where he immediately belonged. He developed Geography into a leading subject at Robinson, and as Director of Studies offered sensitive and careful encouragement to students especially outsiders and those who seemed lost. In his college room he would eventually integrate all his interests in two books that carefully explore the motivations people bring to issues of conservation and the human impact on the natural world – *The Terrestrial Biosphere: Environmental change, ecosystem science, attitudes and values* (2001) and *Why Conserve Nature? Perspectives on meanings and motivations* (2022). As speleologists know well, and as Steve concludes, some of our greatest motivations derive from a sense of place.

Steve's publications on caves and karst are listed as a supplement to Proceedings at http://www.ubss.org.uk/resources/procsupplement/29_1_5-6.pdf

² See Proc. U.B.S.S., 17 (2), 196-197 for a contemporary review.