

My view: Dr. Edwin Kenneth Woodford, O.B.E., Ph.D., 1911–1998

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Professor John Fryer, former director of the British Weed Research Organization, and his colleague, Dr. Keith Holly, submitted this tribute to Dr. E. K. Woodford, one of the founders of our science. It is good that we pause from our hurried lives and work to remember those who went before us and made our discipline what it is. We benefit from the foresight and wisdom of those who preceded us.

Ken Woodford died on September 7, 1998. After a career in agricultural research, he will be remembered in the field of crop protection for the crucial role he played during the 1950s and early 1960s in the evolution of weed science in the United Kingdom and for his work in fostering collaboration between organizations, which led to the formation of the British Crop Protection Council. In recognition of these achievements, he was awarded the Order of the British Empire by Her Majesty, the Queen.

After earning a doctorate in plant physiology at Imperial College, London University, Woodford was appointed to the Tea Research Institute, Tocklai, Assam, India. During World War II, he joined the Gurkha Regiment and was later transferred to the Central Ordnance laboratories of the Indian Army, Kanpur, where with the rank of Major he led a biological research project.

Woodford returned to England in 1949 to join a research team financed by the Agricultural Research Council (ARC) and led by G. E. Blackman. From the team's inception its major aims were to improve methods of weed control in crops with herbicides and to understand the physiological and biochemical basis of selectivity. In 1950, the team became the ARC Unit of Experimental Agronomy. Woodford was assistant director with specific responsibility for weed control.

He quickly realized the enormous potential of selective herbicides to revolutionize agriculture. In addition to creating the Unit's research program, he realized that the team was in a unique position to bring together all who had become involved with weed research and the development of herbicides. Until then, there had been little liaison or collaboration. Woodford's foresight, persistence, and hard work led to the formation in 1953 of the British Weed Control Council (BWCC), which was an effective umbrella organization for many collaborations. The BWCC fostered the development of research and development, emphasized the need for education and communication in weed science, and organized national and international conferences. Woodford was the motivating force behind the First British Weed Control Conference in 1953, and was responsible for the early editions of *The Weed Control Handbook* produced by the BWCC. All these enterprises pooled information from a wide variety of official and commercial sources. The BWCC evolved into the British Crop Protection Council (BCPC), with a worldwide influence on the evolution and practice of effective and safe crop protection.

The rapid developments in weed science in the 1950s and the key role of the Unit of Experimental Agronomy in provid-

ing research, information, and liaison led Woodford to make the case for an independent, government-financed research institution with greater scope, range of facilities, and more permanence than the Unit could offer. Despite skepticism and entrenched resistance, Woodford argued with determination and clarity that weed science should be regarded as a distinct discipline of agriculture. He thereby secured strong support from all sectors of the agricultural industry.

Ultimately, the ARC agreed to finance a headquarters for independent weed research, together with associated information and liaison activities embracing weed control in Third World countries. Thus, on April 1, 1960, the Weed Research Organization (WRO) came into existence at Begbroke Hill, Oxford. Woodford was its first director.

The original mission of WRO precluded basic research and was limited to applied research and information on the technology of weed control. Woodford, against the odds, managed to create the foundations on which WRO would grow to encompass a wide variety of activities and skills from the very practical to the underpinning scientific disciplines. His influence helped to ensure that WRO served as an international center for weed science.

In Europe, Woodford staunchly supported liaison and cooperation between weed scientists. Much credit is due to him for the decision to establish the European Weed Research Council during an international symposium held in Oxford in April 1960, when it was also agreed to proceed with publication of *Weed Research*. The European Weed Research Society evolved from these beginnings.

In 1964, Woodford left WRO on appointment as Director of the Grassland Research Institute at Hurley, where he led a major expansion.

On retirement from Hurley two decades later, Woodford was appointed Director of Scientific Services for the Commonwealth Agricultural Bureaux. He also became managing editor for the BCPC. Both activities brought him back into weed science: CAB was responsible for *Weed Abstracts*, which Woodford did much to initiate in the 1950s, and many BCPC publications were devoted to weeds and herbicides.

Although Ken Woodford's most active involvement in weed research was so long ago, he was one of the great pioneers of weed science who made an enormous contribution to its establishment as a discipline. In Britain, he did more than anyone else in the early years of herbicide development to foster collaboration, trust, and information exchange among organizations that played a role in developing the new technology. He also promoted liaison among researchers throughout the world, helping to break down barriers between the chemical industry and others. Woodford was also among the first to realize and point out the enormous effect herbicides would have on agricultural practice.

Those who knew Ken Woodford will treasure memories of his modesty and self-effacing charm, coupled with his immense determination, foresight, and perseverance.