# Research pioneer: Pierce Ryan

Pierce Ryan spent decades advancing agri-food research in An Foras Taluntais and later TEAGASC. Here we look back at his life and achievements.

Pierce Ryan was Director of An Foras Taluntais (AFT) from 1979 to 1988, and when Teagasc was established on the amalgamation of AFT and An Chomhairle Oiliúna Talmhaíochta (ACOT) in 1988, he was appointed Director of that organisation until his retirement in 1994. He came from a strong farming and nationalist family in Taghmon, Co. Wexford. His uncle Jim would later become Minister for Agriculture and Finance, while his aunt was married to President Sean T. O'Ceallaigh. A classmate tells of how, when most of the students studying Agricultural Science with him in UCD would be making for the football field, Pierce would be heading for the Phoenix Park and the Áras, where he made good use of the extensive library there!

After Pierce finished in the local national school, he attended St Peter's College, Wexford, and thereafter headed to UCD to study Agricultural Science, qualifying in 1951. He then joined the Department of Agriculture based at Johnstown Castle in the fledgling Soils Research Centre. The man who would strongly influence his career, Tom Walsh, then a senior inspector in charge of soils and grassland research in the Department, almost immediately involved Pierce in studying the properties, characteristics and distribution of Irish soils. During this period, he was seconded to the Food and Agriculture Organisation (FAO) of the United Nations in Rome for two years to work on problems of overseas development areas. He returned to the Department in Johnstown Castle in 1957 and obtained his MAgrSc degree from Iowa State University in 1959, concentrating on soil survey methodology.

#### National Soil Survey

Pierce joined the research staff of AFT in 1959, with responsibility for the establishment and operation of the National Soil Survey. Its purpose was to make an inventory of the different soils in the country, their properties, extent, drainage and suitability for various crops. The Survey was carried out on a county-by-county basis. Wexford was completed and published in 1964, followed by Limerick, Carlow, Kildare, Clare, Leitrim and Westmeath, as well as reconnaissance surveys of a number of other counties. The first soil map of the Republic was published in 1964. A later, more detailed map of the whole island, made in co-operation with experts from Northern Ireland, showed that good agricultural land occupied 50 % of the land area in the Republic, with 33 % of it deemed suitable for tillage. The seminal work of the National Soil Survey, led by Pierce, culminated in the publication of the first edition of the 'General Soil Map of Ireland' in 1969. The Soil Survey in the 1960s provided an essential framework for understanding the role of soil type in production responses and regional variability in land productivity, in addition to the identification of drainage problems and solutions for extensive areas of wetlands. Soil survey data were also used in a legal challenge to land valuation based on the Griffith's mid-19th century valuation that paved the way for the abolition of rates on agricultural land. During these times Pierce also undertook a study of certain unusual Irish soils related to the development of outwash materials from glaciation in Ireland, for

# SPECIAL FEATURE: SOIL



Clockwise from top left: Dr Pierce Ryan; Pierce presenting the memorial volumes of Dr Tom Walsh's scientific papers to Tom's wife Mimi while the Doc's two daughters, Rosemary and Bernadette, and his late son, Terry, look on; and, Pierce with Rena Grace, PA to Dr Tom Walsh.





which he was awarded a PhD by Trinity College in 1963. He was elected a member of the Royal Irish Academy in 1967, where he served for several years on the science committee. In the 1960s, he directed major multidisciplinary resource surveys on marginal areas in west Cork, Donegal and Leitrim. These revealed that the main barriers to progress were poor-quality land, demographics, education, access to resources and failure to apply the results of research. The studies also highlighted the incentives that would be necessary to promote the planting of private forests.

#### A driving force

Following a major review of AFT in the late 1960s, Pierce was appointed Deputy Director, and in that role from 1970 he became largely concerned with the implementation of the research programme and the identification of any barriers that restricted progress. He also promoted the employment of interdisciplinary teams where he thought it was the best approach to resolve issues at a commodity- or area-based level. He became heavily involved in promoting linkages with the newly established Agricultural Research Programme of the then European Economic Community (EEC), and how the research programme of AFT could benefit from Community-funded research, while at the same time complementing Community research objectives. On becoming Director in 1979, a new challenge began to emerge in the form of a dramatic change in the external environment. Whereas in the 1960s expansion of agricultural output was driven by successive programmes of economic expansion, in the 1970s accession to the EEC provided further stimulus and enhanced markets for the agricultural economy. Thus, this expansionary environment was the perfect fit for the arrival on the scene of a new agricultural

production-focused research body with a well-endowed budget and its contribution became strongly associated with the marked resurgence in agricultural output, incomes and renewed vitality in the farm sector. However, from the early 1980s the Common Agricultural Policy (CAP) came under increasing pressure as agricultural surpluses began to emerge, imposing considerable strain on the EEC farm budget. Later on, severe restrictions were imposed on agricultural production, best illustrated by the introduction of the milk quota and super levy in 1984. Consequently, the AFT research programme had to recalibrate by placing more emphasis on increasing efficiency in the primary sector, enhancing capability in processing and diversification, and the establishment of a new Food Research Centre in 1985. Simultaneously, budgetary pressures necessitated the introduction of user research levies and commissioned research in order to balance the books of the organisation. It is a testament to Pierce's collegiate style of leadership that he succeeded in re-orienting the research programme towards a more broadly based focus, while at the same time coping with the financial constraints facing the organisation.

## A driving force

As Director of AFT, he came with a track record of scientific achievement in the classification of soil types in Ireland, which was an essential and basic requirement in establishing the most appropriate farming systems and agronomy for Irish agriculture, while leading a relatively large research department. He adopted a collegiate and participatory actor approach in formulating and implementing the research programme, which he also demonstrated in his role as the first Director of Teagasc, as he sought liaison and co-operation with other relevant agencies. Throughout his tenure as Director, he was well regarded and respected for his leadership of the organisation in turbulent times. After Pierce retired he opted to lead a leisurely life, with his primary concern focusing on his family, and satisfied his own personal interests with an almost insatiable attraction towards libraries, and one in particular. There he would concentrate mainly on topics historical, particularly European and Irish, and he had a particular interest in the role played by his native Co. Wexford in the 1798 Rebellion. He would himself recall, when at national school under the influence of a strongly Republican teacher, marching around the schoolyard with his fellow pupils in 1948 holding replica pikes to commemorate the 150th anniversary of the Rebellion. Above all he was an avid Wexford man, proud of its GAA exploits, and he invariably left his scientific objectivity behind on matters pertaining to that county! Pierce is survived by his wife Kate, his daughters Christina and Suzy, his five grandchildren, son-in-law, sisters and brothers.

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