Paul Gordon Jarvis, FRS, FRSE (1935 - 2013)



Paul Jarvis was a very well known and much respected plant ecologist, who made an immense contribution to studies linking the importance of vegetation to the climate.

Paul's interest in botany may well have stemmed from his farming background, but he chose an academic career, reading Botany at Oriel College, Oxford, followed by postgraduate studies at Sheffield on the growth and regeneration of sessile oak, *Quercus petraea*. Two NATO scholarships took Paul and his wife, Margaret, to the Institute of Plant Physiology in Uppsala (Sweden), where they specialised in plant water relations, and Paul gained a second Ph.D.!

In 1964, Paul and his family moved to Australia working at CSIRO with Ralph Slayter, later to become Australia's first Chief Scientist.

Returning to the UK, Paul joined the staff of the Botany Department at Aberdeen University in 1966, where he spent 9 years before moving to Edinburgh in 1975. There he became Professor of Forestry and Natural Resources until he retired in 2001. Professor Mencuccini, University of Edinburgh, wrote, "During those 35 years, Paul's career developed enormously, with ground-breaking studies on several aspects of the environmental physiology of forests, measuring the behaviour of stomata under changing environmental conditions, the penetration of light into forest canopies, water transport in trees and the micro-meteorological measurement of the fluxes of water vapour and carbon dioxide above the canopy. All these studies were characterised by a very innovative combination of strongly physically grounded principles, intelligent construction of novel pieces of equipment and a deep knowledge of the fundamental physiology of trees. He developed one of the first process-based models of forest function, MAESTRO (later renamed MAESTRA by a female researcher), which has been employed for various

purposes for at least three decades. With colleagues, he continued to develop the micro-meteorological method for the measurement of gas fluxes from forests, which eventually lead to the eddy covariance approach currently employed throughout the world."

Paul offered so much to his particular field, writing influential reviews, taking a leading role in a number of important international projects, including the EU-funded EUROFLUX project. This was the first multinational attempt looking at the response of vegetation to climate change. He co-founded the influential journal *Plant, Cell and Environment*, and peer reviewed several others. He served many bodies, including Research Bodies and Scientific Steering Committees. He was a Commissioner of the Countryside for Scotland and enjoyed his involvement as a trustee with the John Muir Trust. He was recognised by the scientific community at home and abroad by being elected Fellow of a number of prestigious bodies - the Royal Society, the Royal Society of Edinburgh, the Royal Swedish Society of Uppsala, the Institute of Foresters, the Institute of Biology. The Czech Republic awarded him the Gregorius J. Mendel Medal for his service there.

On retirement, moving to Aberfeldy, Paul was actively involved in restoring native woodland to the denuded Scottish hills, and became a Director of the Edinburgh Centre for Carbon Management, one aim of which is to promote sequestration of carbon in forests.

Professor Grace, University of Edinburgh, contributes "I first met him when I was a young research student in Sheffield and he was already a lecturer in Aberdeen, late 1967. He came to the place where I worked, the Tapton Experimental Gardens. He was very tough on me; he gave me what is, these days, termed the hair-drier treatment. Only later, when he was my colleague did he become first a friend and then a close friend. In the same way, during scientific debates at conferences and seminars he was exceptionally vigorous and intense. He set the bar very high for his younger colleagues and students, demanding the highest standards of intellectual rigour. Yet he helped innumerable students who came to visit him or whom he met at conferences, generously giving his time to any student who demonstrated a real interest and a willingness to learn. He was an exceptional supervisor of research students. And I've watched him rescue other people's research students who for whatever reason had fallen by the wayside. He leaves a huge scientific diaspora (those who were his students and researchers) extending across the world, setting the same high standards today."

On a personal note, I was a student at Aberdeen University and in the fortunate position to have him as a tutor. He was a superb teacher, always interested and keen to see one reach one's full potential. There was never a moment to lose! I remember early field trips where Paul and his wife Margaret were there, with babes in arms, as keen as mustard to pass on their enthusiasm for all things botanical. I was hooked and chose one of Paul's topics for my thesis! What a challenge, but immensely gratifying! He had me shinning up poles in a forest and risking innumerable stings in a patch of nettles for several weeks! He was rigorous, but invariably positive, in his criticism.

Paul will, indeed, be greatly missed. We are fortunate that he leaves such an immense scientific legacy.

Dot Dahl with biographical information from Mencuccini M, 2013. *Paul Jarvis, FRS, FRSE: plant ecologist who showed the link between forests and the atmosphere*. iForest. http://www.sisef.it/iforest/pdf/?id=ifor0102-006