

Pierre Dansereau — pioneer ecologist

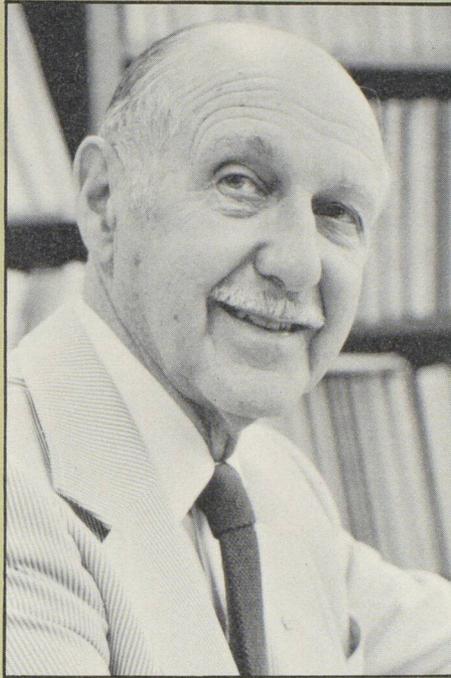
In the 30-volume edition of *Encyclopaedia Britannica*, the following entry is found on page 373: "Dansereau, Pierre (Mackay) (born Oct. 5, 1911, Montreal), plant ecologist, pioneer in the study of the dynamics of tropical, temperate and Arctic forests. Dansereau wrote scientific papers on the taxonomy, cytology and evolution of rock roses (*Cistus*), cinquefoils (*Potentilla*), violets (*Viola*) and maples (*Acer*). In 1960, he received the Fermi Medal of the Toulouse Academy of Science (France) and in 1965, the Pariseau Medal of the Association canadienne-française pour l'Avancement des Sciences (the French-Canadian Association for the advancement of science). His books include *Biogeography, an Ecological Perspective* (1957) and *Contradictions and Biculture* (1964)".

The very sketchy information contained in this biographical entry — it does not go beyond 1965 — sheds light on the innovative character of Dr. Dansereau's work and its impact on the international scene. Outside the closed world of experts, there is no question that people in Canada know little about the impetus given to ecological research by this Quebec researcher during the forties and fifties, when ecology was an obscure discipline whose legitimacy was challenged by the major universities.

Encyclopaedia Britannica does not describe, of course, Dansereau's scientific development, a man who has led in a roundabout way via studies of the world's forests and swamps, towards cities and their human ecosystems. In 1964, he published a work entitled *Contradictions & biculture* (not bioculture). *Biculture*, the subject of discussion here, is meant in the sense intended by the British physician and novelist, C.P. Snow in his well-known work *"Two Cultures and the Scientific Revolution"* (1959). This work deals with both sides of the dispute between the humanities and science.

Pierre Dansereau is both a humanist and a scientist and he has worked ceaselessly to reconcile these two "cultures". During the years that he taught in the United States he played a part, along with the great American geneticist Theodosius Dobzhansky, in founding the "American Teilhard de Chardin Association". Dansereau was the Association's first president.

Now 72, Pierre Dansereau is Professor Emeritus at the University de Québec in Montreal. He continues to teach, to write and is currently preparing a handbook of environmental sciences for the New York Publisher *Wiley's* in which human ecology is considered on an equal footing with plant and animal ecology. Named a Companion of the Order of Canada in 1969 with 11 honorary doctorates and numerous decorations in Canada and abroad to his credit, Dansereau has also been a member of the Science Council of Canada and today remains active in numerous national and international scientific bodies. *Science Dimension* interviewed him in Montreal.



Dan Getz

"*Inoptimum is one of life's constants*"

Science Dimension: How did you become involved in research work? You were 20 in 1931, and your choice of career seems an unusual one for a man of your generation and background. Scientific research was not held in high esteem in Montreal in those days.

Dansereau: I wanted to lead a life that would not force me into a career in the usual professions to which young middle class men like me were practically condemned. I should have been a doctor or a lawyer like certain of my grandfathers, great-grandfathers and many of the adults in my circle of acquaintances. But, I did not want to. It was agriculture that attracted me, scientific agriculture to be exact, and so I registered in the Oka Agricultural Institute. About that time, I met Brother Marie-Victorin and little by little, I strayed from agronomy (the science of field-crop production and soil management).

Science Dimension: Brother Marie-Victorin was a great botanist. His work "La flore laurentienne" (Flora of the Laurentians) remains a classic. Was he

also interested in ecology?

Dansereau: Marie-Victorin is not only the author of "La flore laurentienne". He also published literary works and a large number of specialized studies in which I discovered all sorts of insights that fascinated me. For someone like me, coming from a classical education and dreaming of literature, it was a pivotal experience to meet this man of letters and science, whose interests included a wide range of ideas from philosophy, religion and sociology. Ecology, which greatly excited him, immediately enthralled me.

Science Dimension: Ecology was something new at that time. How did you come to specialize in it?

Dansereau: During the thirties, the only place ecology was taught in Canada was at the University of Alberta. I should add that the whole world regarded geography and ecology as something a bit strange. At the Sorbonne, they did not want to hear about modern genetics, ecology, or taxonomy. It was the same at the major American universities like Harvard, Columbia and California. North American ecology sprang up in the mid-west, in Chicago and Nebraska, between the Rockies and the Appalachians. I wanted to pursue my studies in French and so, in 1936, I left for Europe with my wife to study with the greatest ecologist working in France at that time, Dr. Josias Braun-Blanquet. He was a Swiss who ran the International Centre for Mediterranean