

THE BROTHERS AND NATURAL SCIENCES IN QUEBEC

For a long time now, the Institute has had in its ranks Brothers who have specialised in natural sciences. Some of them even have become famous like Brother Sennen in Spain, Heribaud Joseph in France, Leon in Cuba and Marie Victorin in Canada, to mention but a few. In general, the Brothers's first concern was their work in school. In France they published a whole series of textbooks on zoology, botany and minerology, especially at the end of the 19th century and the beginning of the 20th. The influence of the French Brothers who arrived in Canada from 1904 onwards, and who were often highly competent in zoology, doubtlessly contributed to the expansion of this subject which took place at that time in Canada. In Quebec, interest in natural sciences was due initially to the boost given it by Brother Marie Victorin (1917), and to the expansion of a movement promoting science among young people. Nowadays, ecology has become a topical subject. There are only a few Brothers working in this area.

1. The predominant influence of Brother Marie Victorin (1885-1944).

In Quebec, Brother Marie Victorin was without fear of contradiction the outstanding figure in the field of natural sciences. What made him famous in particular was his "La Flore laurentienne" published in 1935, and the creation of the Montreal botanical garden. For several years now, a very highly coveted scientific prize has been named after him, and is presented every year by the Quebec government.

But Marie Victorin was more than a famous scientist or an efficient administrator. His genius was to have been able to gather around himself others who would spread and continue his work. Brother Rolland Germain (French by birth, 1881-1972) was a very close collaborator, and Brother Alexandre Blouin (1892-1987) illustrated his books. Numerous other scientist were influenced by his example and pursued their work

in a variety of areas of natural sciences: the exploration of the Great North, ethno-botany, producing popular scientific material for newspapers and radio, phyto-geography, ecology, algology, teaching science to very young children, etc. Marie Victorin exerted his influence on adults by his university teaching, his writings and his personal contacts.

His influence extended also to thousands of young people through Young Naturalist Clubs (CJN) which came into existence in the 1930's. A number of Brothers have been involved in the running of these clubs in schools, juniorates and scholasticates. The Clubs were run according to well-defined lines and were affiliated to the Canadian Natural History Society. In the daily newspaper "Le Devoir de Montreal" there appeared a weekly article; regular leaflets on botany, zoology and minerology were distributed to members; exhibitions were organised to encourage competition between different Clubs. The Natural Sciences Exhibition held in Mont Saint Louis (Montreal) in 1933 was spectacular: in the space of two weeks it was visited by 100,000 people. In addition to the activities of these Clubs, there was also in the 1940's a series of broadcasts on Radio Canada intended as an introduction to botany (1941-1946). To stimulate the interest of listeners, competitions were organised for different age-groups, and free educational pamphlets were distributed to those who were interested.

This powerful movement which sought to popularise science and which was characteristic of Quebec at that time (1930-1950) was a stimulating influence on many Brothers. Several formed collections of various sorts, set up biology laboratories, gave or followed courses in natural history, explored remote regions and in particular, the Mingan Archipelago (Gulf of St. Lawrence), prepared teaching materials like illustrated manuals to help with identification of plants, etc. Museums and herbariums still have precious specimens valuable for research purposes.

2. Exceptional contribution of Brother Firmin Laliberte (1905-1988) to entomology.

The work of the agronomist, Brother Firmin Laliberte is in the same tradition as that of Brother Marie Victorin. Recently, Brother Firmin bequeathed, with the permission of the Quebec District Council, his collection of 100,000 insects to the new insectarium of Montreal. It will be located in the Montreal Botanical Garden, founded by Brother Marie Victorin. The collection will be exhibited in a hall which will carry the name of Brother Firmin Laliberte.

All the while he was involved in farming in our agricultural establishments, Brother Firmin became increasingly interested in the world of insects. Under the influence of Jean Henri Fabre, a French entomo-

logist (1823-1915) whose works he had read several times, he built up his impressive collection over a period of 60 years, devoting most of his free time to this fascinating work.

Many young scientists kept in contact with Brother Firmin, seeking the master's valuable advice. He developed their curiosity and the ability to observe closely. He spent his summers in holiday camps, running entomology classes, either at the Le Saisonnier de Lac Beauport camp, near Quebec, or especially at the Rolland Germain camp in Frelighsburg (Quebec) near the frontier with the USA.

Brother Firmin took an active part in the foundation of the Association of Amateur Entomologists of Quebec in 1973, and he was its president for the first five years. He contributed learned articles to the review "Fabriques" which he ran from 1975 to 1984. In 1982 he published his "Glossaire entomologique".

Almost to the end of his life, Brother Firmin was a powerful figure in the world of science teaching to young people, and in learned societies. From many of them he received marks of esteem and awards, in particular from the following: the Societe linneenne of Quebec, the Canadian Entomological Society, the Quebec Entomological Society, and the Association of Amateur Entomologists of Quebec.

3. Adaptation by the Brothers to the needs of today.

Following the example of Brother Firmin Laliberte, many Brothers have had to adapt their working methods to fit in with the evolution that has taken place in Quebec society in the last few years. The setting-up of the Marie Victorin Centre is the result of this process of adaptation. The Centre has been set-up in the basement of one of our communities in the suburbs of Quebec. It was organised by a number of Brothers for the use of young scientists. In this centre there have been brought together specialised works (books, magazines) scientific instruments, collections of all kinds:

birds, insects, plants, shells, etc. The Centre is near a school which runs courses in natural science technology, and students following these courses are able to complete their scientific training at the Centre. Other study groups have been set up to satisfy the needs and interests of outings and visits to ecological centres open to the public. Visits to centres such as this inspired Brothers to find a new way to stimulate scientific interest.

Brother Claude Cote who had created a botanical Garden and a mini-zoo in the scholasticate in 1956, already had a great deal of experience in teaching science to young Brothers. He took his inspiration from the new technology in use in State education (centre for interpretation of nature), and set up an ecological centre at the La Saisonnier de Lac Beauport holiday camp. He prepared rooms for visiting groups and laid out an ecological path in the neighbouring forest. During the summer, young people attending the camp followed courses in science. During the rest of the year, the centre served as a place where courses in ecology were given to various groups. Visitors found displays on various subjects very interesting: subjects included astronomy, mycology, ornithology, minerology, zoology, entomology, botany, etc. There was also an aviary with live birds in it for visitors to see. Little by little, people have been made more aware of the quality of life in the environment, and of the need to protect our ecological heritage by means of collective action. The first stage in this process is to make people aware of their responsibility as individuals.

This short article cannot hope to describe everything that the Brothers of Quebec have done in the field of natural sciences. Many have put in a lot of time in open air centres, and some still do. Certain things have been done which are not strictly speaking part of the Brothers' work: Brother Benoit Laganier, a biologist, takes groups round the Quebec Aquarium; Brother Marcel Blondeau has been spending summer for the last few years in the Quebec Great North collecting plants for Laval University. He has written already several short studies of the flora of the Quebec Eskimo villages.

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