INTRODUCTION

It must be stated at the outset that change has been much less rapid in Canada than in the U.S., largely if not entirely due to the system of supply management under which the poultry industry operates. In the egg industry, most production units are still part of relatively small family farms. Average flock size is the order of 13,000 hens. Most eggs are graded by independent grading stations, although this varies considerably across the country. There is significant production in all 10 provinces, and 1 territory. Numbers of producers and average flock sizes are shown in Table 1. Total egg consumption in Canada has fallen about 3 dozen eggs per capita since 1981, a combination of substantial loss of shell egg sales and a modest increase in processed egg uptake.

The existence of the Marketing Board and Federal Agency structure provides considerable stability to the industry, and less incentive to change, compared with the industries in other, more market-driven, situations. Producers, processors, and consumers have learned to live within the constraints of the system, which has served them reasonably well for the past two decades.

Distribution of production reflects, in most cases, that of the human population. Thus, Ontario has 39.8% of the egg production quota, Quebec 17%, British Columbia 12%, Manitoba 11%, and the remaining provinces less than 10%.

The industry in Eastern Canada was traditionally supported by institutions of research and higher education at Guelph, MacDonald College (McGill University) Laval University, and Nova Scotia Agricultural College (NSAC). For example, as recently as 1980, Guelph had 12 faculty members who devoted virtually 100% of their time to poultry research and teaching. In addition, there was a large research institute operated by Agriculture Canada located in Ottawa, where approximately 10 of the scientific staff dealt almost exclusively with poultry.

Research was funded primarily (with the exception noted above) by provincial governments.

In common with many jurisdictions around the world, most Canadian provinces began to question all research expenditures, not just those for poultry, over the past decade.

THE BEGINNING OF INDUSTRIAL FUNDING

In 1980, the Ontario Egg Board began to provide relatively small grants to specific research projects, mainly at the University of Guelph but also elsewhere when the occasion arose. It must be emphasized that the structure and powers of the Boards makes them the ideal vehicle for the collection of research dollars. They already collect money by means of a check-off for administration, promotion, and in the case of the Egg Boards, levy for industrial (breaker) product subsidization. What is easier than to add a fraction of a cent for research? In Ontario, based on an allocation of just under 7 million hens, a levy of 1 ¢/doz yields over $1.5 Canadian1 million annually.

The Board established a Research Committee and solicited proposals from researchers. During the 1980s the budget for these research grants rose from $50,000 to $80,000 annually. Other Boards representing chickens, turkeys, and broiler hatching eggs and chicks also became involved, but in a less formalized way than the Ontario Egg Board.

At the same time, as other sources of funding became more demanding, we experienced an increase in the number of projects submitted. At this point, we became concerned that rather than being considered as a source of funding to “top up” the financing of a project, we...
were regarded as the primary vehicle, and our budget did not permit us to fulfill this role. Therefore, the funding tended to become conditional on matching funds being made available, usually through government at either the federal or provincial level.

Many of the other Marketing Boards also became involved in research funding. However, with its large production base, Ontario had the greatest potential and probably made the largest impact.

**PARTNERSHIPS AND INDUSTRIAL FUNDING**

In 1988, after several years in the planning and development stage, the Ontario Egg Board entered into an agreement with the University of Guelph to establish an Egg Chair. The Board made a one-time donation of $1 million to the University, in the form of an endowment, with the interest being used to finance the incumbent’s salary. The hope was to attract matching funds from other sources to provide research assistance. In any event, the first incumbent was unable to attract such matching funds, partly because of the structure of the Chair as an endowment. Subsequently, the $1 million was returned to the Board and was replaced by an annual grant to finance the Chair. A new incumbent at a slightly lower academic standing began work on January 1, 1996, and his salary is matched by the Natural Sciences and Engineering Research Council (NSERC) to provide for hiring of graduate students and other research assistance. As far as I can determine, this Chair is unique in Canada as far as the poultry industry is concerned.

Another type of partnership that may be a model for others was instituted 2 yr ago. This partnership involves studies of the protein components of the eggshell. It is funded by the Ontario Egg Producers’ Marketing Board (OEPMB), Agriculture and Agri-Food Canada (AAFC), the British Egg Marketing Board Trust, and the French Institut Nationale de la Recherche Agronomique (INRA). The work is shared among scientists at the University of Ottawa, AAFC, the University of Glasgow, and INRA. The object here was to involve top researchers in the field world-wide, to secure synergism and avoid duplication of effort.

The Canadian Egg Marketing Agency (CEMA) has also been involved in research from time to time, providing ad hoc funding to selected projects, usually in the field of egg biochemistry. These activities tended to be highly confidential and their outcome is not known to the public. However, there is a possibility that CEMA will contribute to the funding of research in the future.

**POULTRY INDUSTRY CENTRE**

In 1989, again in Ontario, a group of concerned poultry industry people began to develop a research endowment fund under the name of the Poultry Industry Centre. This fund was in response to the very clear message being sent by the various levels of government that in the future, poultry research would be funded only when industrial support was clearly evident. The Centre is managed by a Board of Trustees, and solicits funding in cash or pledges from Marketing Boards, corporations, and individuals. The majority of the money so far collected is invested in fixed rate securities, and the interest used to provide seed funding for a variety of research projects. Just under $1 million has been received, and another $300,000 pledged as of June 1996. Up to early 1996, $150,000 has been provided to 18 different research projects.

In addition to its research activities, the Centre also conducts educational activities in the form of Producer Meetings and a series of Factsheets, edited by its Technical Adviser, John D. Summers. The individual grants provided by the Centre are relatively modest, and all are more than matched by funding from other sources.

**ATLANTIC POULTRY RESEARCH INSTITUTE**

The Atlantic Poultry Research Institute (APRI) was funded to combine and coordinate the activities of industry and governments in the four Atlantic provinces—New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland. It must be pointed out that these provinces between them account for only 1.6 million laying hens, less than 10% of the national total. It has an annual budget of between $50,000 and $70,000, with about half coming from provincial governments and the balance from industry. The industry has a scientific officer, located at NSAC. Most of the research
THE SITUATION TODAY

The University of Guelph continues as an institution with a major emphasis on poultry, and a total budget of $2 million. Much less direct faculty support is available than in the past. Although more than 10 faculty members in the Department of Animal and Poultry Science have some poultry involvement, their combined effort is equivalent to about 3.5 full time people. The Poultry Research station at Arkell is a state-of-the art facility, owned by the Provincial Government, and managed by the University.

The University does not offer “Production” courses any longer, but as many as 10 individual courses to which Animal Science students have access contain segments concerning poultry. As the response to specialist Production courses was very often very low, it is considered that more exposure is given to the poultry science than hitherto.

The Ontario Veterinary College (OVC) student numbers are also down; only the equivalent of two faculty are committed to poultry. In the past 12 mo, one long-time member retired and another left for another position. Very recently, the Ontario Government and the University have begun to combine their interests in diagnostic and laboratory services, which may result in a somewhat expanded poultry interest at the OVC. For the future, the University is looking for more and significant support for faculty positions from industry. Such support would imply long-term support on a consistent basis, in contrast to the ad hoc support of individual projects that typified the beginnings of industrial support.

Poultry interest at Université Laval have experienced a rejuvenation in recent years, although this is dependent on a core group of enthusiasts, whose total time devoted to poultry is equivalent to about two people full time. They are strong in genetics and nutrition. There is some limited industrial support for the research, and this is matched by the Quebec government.

There is a Poultry Production course, which attracts about 30 students each year, and an Animal Production course with a poultry component of about 25%, which attracts 50 students.

Nova Scotia Agricultural College continues to have a modest involvement with poultry teaching and research, but with the exception of one former Agriculture Canada scientist who has been seconded to the College, there is not much more than one full-time equivalent assigned to poultry at the institution. Industry supports what is done via the APRI.

MacDonald College (McGill University) has a small nucleus of poultry people, with specialization in molecular genetics and nutrition-physiology. There is an example of industry/university partnerships in that the Chair of Molecular Genetics is jointly funded by Shaver Poultry Breeding Farms Ltd. and NSERC.

Egg research is currently under way in most provinces, but the greatest volume is in Alberta and Ontario.