Provincial Agrologists Promote Environmental Stewardship Initiatives

JANET KANTERS May 2001

As Canada enters the 21st century, environmental issues continue to grow in importance. In the agriculture industry in particular, ensuring all 'checks and balances' are in place is top of mind for many in the industry.

In Alberta, the agricultural production and processing industry has made tremendous progress in environmental stewardship over the past decade. In particular, there has been an increase in awareness of producer responsibilities and risks associated with livestock production.

Page Stuart is a professional agrologist (P.Ag.), and employed as research director with Highland Feeders of Vegreville, Alberta. She also serves as director with the Alberta Cattle Feeders Association. Stuart says Alberta provincial initiatives such as the Generally Accepted Practices for Alberta Feedlot Operators and the Environmental Farm Plan underline current industry commitment to address environmental concerns.

"Many of the issues related to standards of environmental practice for intensive livestock operations have centred around Codes of Practice," she says. "Livestock industry groups have played a strong role in supporting provincial regulations and standards for environmental sustainability for these operations."

In Alberta, many local agricultural producer associations work with communities to improve the environment. Some examples include the Old Man River Basin Water Quality initiative, Crowfoot Creek Watershed group, North Saskatchewan River initiative and the Lethbridge County Producers. The trend, notes Stuart, has been for producers to work closely with Alberta Environment and Alberta Agriculture, Food and Rural Development (AAFRD), recognizing these government departments have expertise, knowledge and extension services that can augment the effort the producers are incorporating into their practices.

According to Stuart, over $3 million has been spent by Alberta producers on environmental research, supporting areas that identify production practices to minimize environmental impacts to soil, water and air.

"The face of agriculture has changed," she says. "Margins are tighter, requiring producers to find better and more efficient ways of maximizing the use of their resources – soil, water and air. In agronomically driven environments, producers have recognized that maximizing the value of their resources increases their profitability, directly adding to their bottom line."

Communicating the importance of environmental stewardship is an ongoing effort by all those in the agriculture industry. Indeed, Stuart notes that in the beef industry, it is just as important to get information to the 35-head producer as it is to communicate that same

information to the 35,000-head cattle feeding operation.

"Generally, people who are involved in agriculture are people who are committed to the land and depend on it for their livelihood," she says. "Those of us involved in agriculture are proud of the legacy of environmentally-sustainable production that we have forged, but are practical enough to recognize that as science provides us with new knowledge – as risk analysis models become more complex – that we have increasing opportunities to refine and improve our practices."

Highland Feeders recognizes value

Highland Feeders in Vegreville engages in research that contributes to areas touching on aspects of health, production and/or environmental practices. Since the inception of the feedlot, owners Bernie and Mike Kotelko have recognized the value of maximizing the use of their environmental and agriculture resources to improve productivity and, therefore, profitability.

Highland's research projects have included different composting methods to maximize retention of nitrogen in the manure, reducing the volatization (evaporation) into the atmosphere. The maintenance of the cattle pens includes box scraping to ensure dust and other particulate matter in the air is reduced. And keeping the pen surface consistently sloped and free of excess dust and manure buildup ensures runoff is directed to the irrigation pond.

"The piled manure is also used as a bedding pack during winter months, and a track hoe is used to turn the pile several times before the manure is spread on Highland's cropland," says Stuart. "The benefit of this practice is that the 'composted' manure in the pen is reduced in volume by up to one-third, reducing the cost to transport it to adjacent fields. In addition, the manure that is applied is a more consistent product, allowing for more predictable application rates."

Highland Feeders maintains a strong commitment to extending information to both the agricultural and non-agricultural public. In addition to tours of the feedlot operation, they regularly present information on research projects and environmental practices to producer groups, industry groups and the community.

"People involved in agriculture have evolved from an environment of trust, commitment and respect for people who are willing to put the physical and emotional effort into agriculture that is required in today's business environment," notes Stuart. "There is no question that producers appreciate knowledge from people that are walking the walk and talking the talk. By extending information to producers, we hope to demonstrate that good environmental practices can be both economically and agronomically viable, while meeting high standards of environmental sustainability."

Intensive livestock operations highly visible

Through organizations like the Alberta Cattle Feeders Association, intensive livestock operations within Alberta have access to a significant amount of practical information that can be incorporated into their operations. In the intensive livestock industry, producers recognize they are highly visible and a major cause of concern to the public. As a result, producers realize it is important

to demonstrate their commitment to environmental practices.

“Guidelines which we follow include the 2000 Code of Practice, which had significant input from livestock producers, industry groups, the public and the provincial government,” says Stuart. “Currently, the Alberta Cattle Feeders Association has been working with Alberta Agriculture, Food and Rural Development, asking that provincial regulations and standards be developed that are outcome-based consistent, practical and scientifically sound. In addition, producers throughout the province are working with their communities and neighbours to resolve any issues that arise, with the goal of preventing unnecessary conflict.”

While current practices are certainly addressing the very real concerns of environmental sustainability as it relates to the livestock industry, even more is being done. For instance, an Ontario-derived Environmental Farm Plan is currently being adapted to Alberta’s industry. The program will offer producers an opportunity to benchmark their progress against defined standards, identifying not just the areas in which they may improve, but also providing them with specific actions they may take to improve the environmental sustainability of their operations.

Provincial regulations and standards in intensive livestock operations that are outcome based and scientifically valid will assist in providing a consistent platform for comparison, demonstrating that intensive agriculture is committed to protecting Alberta’s – and Canada’s – resources. They key to progress in this area, says Stuart, is having stakeholders work together to apply facts to develop policy. As well, it is crucial that the industry increase the public’s understanding of the issues through education and awareness.

“It is critical that we, as professional agrologists, maintain a high level of objectivity, underlined by good science,” says Stuart. “We are in the tenuous but privileged role of being respected by both the producers and the public. Additionally, agrologists can continue to be involved in research that will afford practical solutions based on scientific principles - ones that can be incorporated into practical working systems while meeting the needs of the public good.”