

The Culture and Agriculture of Animal Production¹

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▪ Animal Mythology

According to the legends of the Ojibwa people, humans were able to survive in the world because of the cooperation of animals, beginning with the turtle who allowed its shell to form the base of the land, and the toad who carried soil up from the depths.

For the people of ancient Egypt, a person's destiny after death was decided by the god Anubis (who was part jackal), the goddess Matet (who was part falcon), and other deities who spanned the human, animal, and supernatural realms.

In the opening chapter of the Bible, all beings were created by a single, omnipotent God who then gave humans the responsibility of ruling over the other species in His place.

As we see from these examples, there is a widespread tendency for cultures to possess an "animal mythology" which helps to define the relationship between humans and other species. Animal mythology, in this sense, is not a negative term implying incorrect or out-dated ideas; it refers rather to popular beliefs and values regarding animals, often best seen in a culture's art and stories, which influence how people view animals and what they judge to be proper conduct toward them.

Currently in the animal-based industries, animals are often viewed as commodities to be produced, processed, and traded. However, this view of animals may clash with the animal mythology of our culture, and that clash can become a source of conflict and public concern. Thus, to understand public

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concerns over the use of animals in agriculture, we need first to understand the mythology on which our culture's values are based.

▪ **The Nature of Animals in Western Mythology**

Any animal mythology involves beliefs about what animals are like, and related beliefs about how valuable and important they are. In our culture, the domestic dog has constantly been portrayed in art and literature as a loyal and sympathetic friend to humankind. Consistent with this view, dogs are highly valued: typically they are treated as members of human families, given distinctive names, rescued from harm by public institutions, and totally exempted from slaughter for human food.

Ironically, it is the dog's close relative, the wolf, who traditionally occupies the lowest end of the scale of value. Throughout our folk literature, the wolf is portrayed as an enemy of humans who connives to eat children and old people, and whose death is always a source of satisfaction. And in line with this negative mythology, people for centuries have hunted, trapped and poisoned wolves with few regrets, and until recent decades public funds in North America were spent to encourage people to exterminate wolves.

The farmed animals fall between these two extremes. They are seen as very much a part of human culture, and sometimes a source of great pride, but are valued mainly for their practical usefulness. Hence, they are seen as worthy of human care and consideration, but in ways that are generally consistent with their practical value.

Within our value system, therefore, it might seem completely logical for a person to take an aging dog to a veterinarian to prolong its life, then carefully (so as to avoid causing undue stress) load a truck with pigs to be shipped for slaughter, and finally set out a leg-hold trap to do away with some pesky coyote. When we think about it, those three species are roughly similar in their level of mental functioning, their capacity for suffering, and other attributes that make the animal's welfare a legitimate concern. The fact that we treat the species so differently shows the powerful influence of our animal mythology on our day-to-day actions.

Nonetheless, even deeply rooted traditional beliefs such as these are open to change. As one example, Thomas Dunlap (1988), in a book called *Saving America's Wildlife* describes the vast changes that have occurred in the last 50 years in our attitude toward the wolf. As Dunlap notes, increased scientific study of wolves -- their behaviour, communication, and role in ecological systems -- led to the wolf losing its image of a treacherous villain, and coming to be seen instead as an intelligent, family-living animal serving important

ecological functions. In line with this about-face, public funding for the killing of wolves was withdrawn, and now public funds are even being spent to preserve wolves and to re-establish them in parts of their former range.

This rethinking the value of the wolf is just one example of a widespread change in public attitudes toward animals. One of our culture's longest-running debates, dating back at least to ancient Greece, is whether humans are unique and set apart from all other species, or whether we are simply one species among many, closely related to the animal world. A few centuries ago, those who saw humans as unique had some widely accepted beliefs on their side. In terms of appearance, animals *looked* different: animals had four legs and fur, or wings and feathers, or fins and scales -- nothing like the upright, smooth-skinned creatures who saw themselves as designed to resemble God. In terms of origins, the Bible portrayed humans as having resulted from a separate act of creation, and living in a special relationship with the Creator. And in terms of mental and spiritual life, animals were often viewed as intellectually inferior, as not capable of logical thought, and as having bodies but no souls.

Over the centuries, science has slowly been eroding these claims to human uniqueness, starting with the notion of unique appearance. During the Middle Ages, one of the frontiers of scientific research was anatomy, and "dissecting theatres" -- complete with a gallery for the interested public -- sprouted up across Europe. Through anatomical research, the basic similarity of the vertebrate body slowly came to be recognized -- that the wing of a bird is really a modified arm; that the hoof of a horse is a modified toe -- and this new understanding worked its way into popular culture. According to one historian, by the year 1700 the basic anatomical similarity between humans and other species was widely recognized.

A second barrier fell with the theory of evolution in the 1800s. Through the ideas of Charles Darwin and others, people began to see the human species sharing not only a common anatomy with other species, but a common ancestry as well. This idea was resisted by many who saw it as a direct challenge to the special status of humans, but it has gradually moved from being a revolutionary idea to being the predominant view in society.

During the late 1900s, the study of animal behaviour has led to a further major change in our view of animals, this one centred on their mental and emotional lives. Key figures in this development were field biologists such as Jane Goodall who studied animals -- in her case chimpanzees -- not just as examples of a species type, but studied them more as "persons" who possess unique life histories and complex social and mental lives. For example, from Jane Goodall (1971), we learn of McGregor, a chimpanzee who was stricken with polio in adulthood and tried pathetically to be accepted by his old friends who avoided him once he was crippled, and we learn of Flint, an eight-year-old

who remained so attached to his aging mother that when she died, he stayed near her death place until he, too, died of starvation.

Based on these studies, Roger Fouts (1997) - famous for communicating with chimpanzees in American Sign Language - describes the chimpanzee as,

"a highly intelligent, co-operative, and violent primate who nurtures family bonds, adopts orphans, mourns the death of mothers, practices self-medication, struggles for power, and wages war."

The gap between humans and other species could hardly seem more narrow.

This new popular understanding of chimpanzees, wolves, and other charismatic species is just the most visible tip of a much broader evolution in our thinking about the nature and value of animals - a change which today is causing serious questioning of ways of treating animals that seemed uncontroversial a few decades ago. The implications for the animal-based industries are profound.

▪ **The Agricultural Use of Animals in Western Mythology**

The farming of animals involves a mythology of its own; including at least two deeply rooted ideas that have influenced people's perception and acceptance of animal production.

One, inherited in part from the Bible, is the value that we attach to diligent care of animals. The Bible arose in a culture where raising animals was a major economic activity. For the Biblical people to prosper, they had to provide their animals with appropriate care, and that practical necessity was reinforced by a culture that attached great value to diligent animal care. David, the great king of the Israelite people, was prepared for this role by the experience of tending his father's sheep. Rebecca was chosen as the mother of the Israelite nation when she insisted on giving water not only to a thirsty stranger but to his camels as well. And of course, a diligent shepherd protecting a flock of sheep was such a positive image that it was often used to describe the goodness of God. Thus, the Biblical culture put diligent animal care-givers on a kind of moral pedestal.

Our modern mythology of animal agriculture also includes a special respect for family farming. As philosopher Paul Thompson (1998) has pointed out, North Americans have traditionally seen family farming as a distinctive life-style involving virtue, simplicity, and harmony with the land. Animals played an important role in this image. Animals were an integral part of the ecology and

economy of the farm, with the different species serving important and complementary functions. Animals were also important for moral education, because children often learned responsibility by caring for animals. And animals on traditional farms were seen as living a natural and wholesome life, just as the farming family was seen as living a natural and wholesome life, removed from the artificiality of the city. Thus North American culture has tended to put family farming on a moral pedestal.

In summary, our culture attaches strong positive value to diligent animal care, and to the farm family living a wholesome life in harmony with its animals and the land. As long as animal production is perceived by the public as conforming to these ideals, it is almost guaranteed a certain level of public trust and approval. This popular mythology has helped set the stage for a vigorous battle to re-mold public perceptions of modern animal production.

■ **Conflicting Portrayals of Animal Production**

Partly because our cultural attitudes toward animals are in such a state of change, there has been intense debate about the use of animals in commercial agriculture. Some critics, recognizing the positive traditional images of animal agriculture described above, have tried to reshape public perceptions of animal production along six themes illustrated in the quotations in Table 1.

Table 1. Six quotations illustrating the 'New Perception' of animal agriculture.

- 1 In the United States, as elsewhere, factory farming has become a major commercial enterprise that is threatening the family farm with extinction.
Animal Rights
Edward F. Dolan, Jr. (1986)
- 2 The problem is that the behemoths of modern agribusiness seek profit without reference to any ethical sensitivity to the animals in their keeping.
Diet for a New America
John Robbins (1987)
- 3 Whether they are battery chickens in their cages or pigs in sow stalls, all experience the same mental anguish that would drive many humans to suicide - but factory-farmed animals do not have that option.
The Price of Meat
Danny Penman (1996)

- 4 Eating meat has been linked to heart disease, cancer, diabetes, arthritis, and osteoporosis. Animal fat and cholesterol ... are the leading causes of heart attacks and strokes. Other health risks are increased by the chemicals, antibiotics, and hormones found in meat... Not eating meat, on the other hand, significantly reduces your risk of illness.
- The Animal Rights Handbook*
Laura Fraser et al. (1990)
- 5 [Cattle] are destroying the very biosphere itself, threatening the future stability and viability of entire bioregions of the world. Cattle are among the major environmental threats facing the planet today.
- Beyond Beef*
Jeremy Rifkin (1992)
- 6 The vast tonnage of food fed to animals to supply the rich countries with their heavily meat-based diet is given at the expense of hungry people around the world.
- Old MacDonald's Factory Farm*
C. David Coats (1989)
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These six quotations represent the culmination of 40 years of evolving public concern about animal production. In the 1960's, the major concern was the welfare of farm animals. Since that time, however, other critics have raised additional issues, so that today, animal welfare is just one of several elements that constitute what we might call the '*New Perception*' of animal agriculture. According to this *New Perception*, large corporations have all but replaced the family farm (quotation #1 in Table 1), greed for profit has replaced the traditional ethic of animal care (#2), animals are being raised in deplorable conditions (#3), animal products are bad for human health (#4), animal production is bad for the environment (#5), and the consumption of meat in the developed countries reduces the amount of food available for the world's hungry (#6).

In response to these claims, many agricultural organizations have created promotional materials of their own, often in the form of brochures, websites, and videos. These depict animal agriculture as fully reflecting diligent animal care and family farming, while adding certain advantages made available by modern knowledge and technology. To quote some examples, these materials claim that domestic cattle "live in the lap of luxury". Confinement housing, instead of causing animals to suffer, is claimed "to protect the health and welfare of the animals"; and practices such as branding, dehorning and castration are said to be done "to ensure the welfare of the animal." Industry materials deny that corporations play a large role in animal agriculture, emphasizing instead that the vast majority of farms are owned and operated by

families and individuals. The same materials claim that traditional animal care values are firmly in place and that producers are "committed to providing the utmost in humane care". Animal production is also said to benefit the environment because grazing "improves vegetation health and diversity", and livestock "complete the nutrient cycle, returning valuable manure to the land". In a similar way, industry materials contradict each of the various criticisms, countering the negative over-generalizations of the critics with positive over-generalizations from the industry itself.

The situation has, in effect, created a propaganda battle involving two oversimplified portrayals of animal production which contradict each other on a wide range of issues. The result is a public that is highly confused, not just about the rights and wrongs of animal production, but about the simple facts of what modern animal production entails. And when there is such profound disagreement about the basic facts, there is very little hope of achieving agreement on how we should proceed.

Although public information and debate has been dismal, the issues raised by the debate are actually of the utmost importance, not just for the image of animal production, but for the future of society. Animal production is one of the most widespread and important industries on Earth. During the last 50 years animal production has undergone revolutionary changes in the developed countries, with far-ranging effects on people, animals, and future generations. Given these changes, we badly need to assess how current animal production practices affect:

- the welfare of animals and of animal producers
- sustainability
- world hunger and food security
- human health
- global climate and environment

These are essentially the issues being raised by the critics of animal production, hence, the discriminating public, although perhaps not convinced by the negative claims of the critics nor the positive claims of industry defenders, at least recognize that serious issues are at stake.

▪ **Reconciling Animal Production with our Animal Mythologies**

In this state of public confusion and conflict, are there ways of reconciling commercial use of animals with our animal mythology? To move toward a

solution will require at least three elements: re-focussed research, leadership from the animal industries, and facilitation by government.

In terms of research, the questions raised in the debate about animal production are clearly some of the most important issues facing animal production today and for the future. The issues cannot be resolved by public relations campaigns. Instead, we need genuine research that will identify better and worse options and begin to build consensus around the issues. To conduct such research may not require additional resources as much as a cultural change within the animal research community. Canada already devotes substantial resources to research on animal agriculture, most of which is oriented toward solving practical, technical problems of production and processing, or toward helping commercial companies develop new products for use in animal agriculture. A modest fraction of the talent and public funding directed toward these technical issues could do a great deal toward helping resolve the issues raised by the *'New Perception'*. For this to happen, we need a recognition by scientists, research managers and funding agencies that public concerns about animal agriculture constitute research issues worthy of investigation.

Research will only be of value, however, if the industry is willing to address the issues. Therefore, we need people of vision within the animal industries to look carefully at our changing cultural context, and identify the threats and opportunities that it creates. Are there methods of production, housing or slaughter that an informed public would not support? If so, what kind of incentives or other means might work to phase them out? Should the industry itself create incentives, should it develop means of self-regulation, or should it ask government to help? Are there trade opportunities that might be missed if Canada is perceived as having inadequate animal welfare or environmental standards? Conversely, are there trade opportunities for Canadian producers to supply welfare- and environment-friendly products into international markets? These are among the questions that need to be asked in the context of thoughtful, future-oriented planning by the industry, based on an awareness of our culture's changing animal mythology.

Finally, what do we need government to do? The challenge that comes from our changing culture is, of course, too broad for any one commodity group to deal with on its own. Therefore, some form of coordinating effort is needed from government to help interested parties respond to the issues together. At present, government-sponsored responses to the issues are very piece-meal. They include an Expert Committee under CARC dealing with animal welfare, a federal agency dealing with food safety, and various provincial and municipal bodies regulating environmental impacts. Today, however, these various issues can no longer be dealt with in isolation. There is no point creating benefits for food safety that are bad for the environment, or benefits for the environment that are bad for animal welfare. Therefore we -- collectively, and

with leadership from government - need an on-going forum on animal agriculture to help the industry and the public to develop plans and policies that will help position animal production for the future.

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