

The Third Dimension to Livestock

by A.F. Fraser, MRCVS, MVSc, Newfoundland

Although animal farming may not be the oldest profession, it is surely the oldest industry. It is a venerable one. Its basic feature is caring for life in its animals. This fundamental aspect of the industry is now acquiring wider attention, stemming from the modern recognition of a third dimension to animals.

Well known to us: the animal's body form in such characteristics as conformation, size, physical condition, breed type, stages of body development, weight and general appearance. In animal production physical form is the foremost factor; it is the first dimension of the animal on the farm or ranch.

The farm animal's second dimension is its productivity. This is its industrial purpose. Its business on the farm is to make a product. The main products range through milk, meat, eggs to young of their own kind. By-products exist as a myriad of commodities. By such productivity are we fed. The general public appreciates this.

Another inherent feature of our farm animals is their manifold behaviour, their own ethos. This constitutes a third dimension. Their sentient dynamics are a composition of their sensibility and related behaviour. Evidently, physical form, productivity and dynamic nature are combined in the totality of our livestock.

The domesticated animal's true nature may be veiled, in some measure, by its particular controls. Animal farming involves special forms of control. By this controlled custody the animal's natural dynamics are suppressed or managed to great extent. This is much less so on the ranch where space is abundantly provided.

The farm animals belong to species which have wild-living relatives. These counterparts can show their primary natures more freely but a lot of the equivalent behaviour, however veiled it may be on the farm, is inherent in our livestock. Much of this shows up in their self-maintenance and social interfacing. They have certainly not had their various reproductive ways obscured by domestication. Clearly they have the influence of genetics in their characteristic behaviour as well as in their bodies.

While the primary, behavioural nature of a free-living species can be seen in the wild, the secondary nature of the individual is lost to us there. With close surveillance on the farm, however, the individuality of the animal can often be recognized. Each individual may have its own variety of behavioural characteristics in habits, traits and disposition. It may possess such individuality to a greater or lesser extent as a secondary nature. Some of this behavioural individuality is learned, some is inherited. Primary and secondary natures make compound natures and provide complexity to this behavioural dimension.

The manifestations of the animal's nature and senses can reveal many of the moods, wants and emotional states that we know as well in ourselves. Some of their senses are keener than ours. Although livestock definitely does not have intelligence as we know it at the human level, they seem to have some basic "feelings" that resemble ours to some extent. Their "feelings" go beyond the well-acknowledged ones of pain, hunger, fear and rage.

As regards intelligence versus "feelings" (sense vs sensibility), livestock does not have the type of forebrain for the former, but they do have brain matter for the latter. Many natural "feelings" are dealt with in the brain's inner, elaborate limbic system. Our livestock has perfectly good limbic systems. These animals have a bit more to their nature than we used to think. The

past quarter century of scientific publishing on applied ethology has shown this.

A clarified picture of the two main problematic states of stress and suffering can emerge from this widened concept of our animals' natures. Stress is essentially severe disturbance to this vulnerable dimension of the animal. Suffering, in turn, is rooted in such disturbance and suppressed well-being. It emanates in expressed behaviour, either actively or passively.

Partly in recognition of our new awareness on animal sensibility, codes of practice have now been defined in official publications for the farming of animals. Although these are voluntary codes, they carry the weight of informed knowledge and some public opinion. In addition, there is increased federal legislation, such as the imminent Bill C-15 B which deals with cruelty to animals that are capable of sensing pain.

The Codes of Practice may not be totally perfect; they are a first effort. This long-established animal industry needs these modern guidelines for some improved national standards of husbandry to be created. The Codes basically call for good methods of animal care in the livestock industry of today.

The Codes give heed to the dynamic sensory dimension of livestock life. As this dimension becomes better recognized in time, the guidelines for farm animal welfare will likely be more specific on matters impacting on it. Future editions of the Codes, for the management of the farm animals of tomorrow, will surely progress in this direction. They must guide the industry further in such areas as confinement, crowding, transport and slaughter where there is much scope for refinement.