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Kernkamp lecture: Rights, lies, and videotape

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The title of this paper is a parody of the Steven Soderbergh movie entitled “Sex, Lies, and Videotape”. In spite of its provocative title, it is mostly just people talking. Likewise, while the topic of animal welfare can be reduced to a salacious portrayal of absurd statements and actions, the aim of this paper is to discuss this important area while avoid the extreme positions often taken on this subject. I think that, despite its importance, dialogue has been stunted as the approaches and strategies are divergent and often prevent conversation. Maybe sex and welfare have something in common.

I think that producers have often chosen what I call the “just spank me” option. I learned about this option when one day my son, when he was five years old, was caught teasing his sister. I, being the modern parent, tried to set him down and discuss the lack of consideration that he showed. I try to get him to discuss his sensitivity to recognize the needs of others. His response was simply, “Dad, why don’t you just spank me?”. I think that the swine industry sometimes just wants to be told the rules of the game and continue playing. This is incorrect as the playing field is unstable and possibly will be taken away from us.

This dialogue, even within our industry, can be divided into rights, lies and videotape. In other words, there needs to be a real discussion on the philosophical approach to the farming of animals. There also needs to be an identification of beliefs about the welfare of animals that are not true and challenges need to be stated repeatedly. Finally, we need to more about the activities of our pigs, what they do and what they don’t do.

The experts

In this milieu, the experts are the stockpersons, with others that visit farms running a close second. We must argue that there needs to be a good and consistent relationship with the animals to develop an expertise. Caregiving is not something that can be simply based on first principles or reviews of literature. We must be willing to place ourselves in the middle of the discussion. Stockpersons must be willing to go up to those that question the livestock industry and say three things:

- Thank you for caring for the animals entrusted to me and my colleagues.
- Please allow me to discuss with you the many challenges we have in caring for our animals.
- If you have further questions, please discuss it with me or one of my colleagues.

Too often farms are portrayed as amoral or immoral entities that must be regulated. The Florida decision on gestation stalls was driven by a number of different expectations, many of which we did not address correctly. The argument was usually presented in this manner:

Corporate hog factories pollute the environment

Hog factories produce massive amounts of animal waste, polluting water and putrefying the air. If voters approve Amendment 10, we’ll prevent mega hog factories from wreaking environmental havoc in Florida. The Florida Sierra Club has endorsed Amendment 10.

Many pig farmers treat animals well and do not use gestation crates. Small farmers traditionally allow hogs to move around and to graze on pasture. This measure targets large factory farms that are displacing small family farms (Floridians for Humane Farms, 2003).

As in this statement, almost invariably the decision-makers and swine welfare are portrayed as “corporate hog factories”. The argument is that the owners and caregivers of pigs are profit maximizing corporate entities that treat pigs as part of the machinery. The argument this is that there is no recognition of the obligation for care for animals, and many critics have identified cases where, in fact, distressed and dysfunctional farms have not provided adequate care for their animals. We must emphasize that pigs are not machinery and that the decision-making surrounding these animals takes into account their real needs.

The elements

When we address the needs of pigs, however, there are real differences in assessing the needs of pigs. Those who argue for the rights of pigs usually argue on the basis of some equivalency between species. The most common argument against gestation stalls is that “We would not

do that to a dog". This argues that each animal has a right to existence that transcends its purpose. This equivalency of species is an attractive philosophical approach and has been compared to the emancipation of slaves and women. What it does not recognize is the inherent differences between species in purpose and needs.

Even for veterinary students, I need to emphasize that farmed animals are produced to be killed. A natural death is a failure. They are domesticated animals that are bred to thrive within farms and provide utility to humans. Their existence is dependent on their utility. When they ceased to be of financial worth, or conversely, their value is maximized, they must be killed. While they are alive, however, the farmer has real obligations to meet the needs of the animal. Those needs are controversial. Probably the most commonly quoted list of needs are the five freedoms (Brambell, 1965), as shown below.

- Freedom from thirst, hunger and malnutrition, by having access to fresh water and a healthy diet
- Freedom from discomfort by having a suitable environment, shelter and a resting place
- Freedom from pain, injury and disease by prevention of cruelty and illness by care and rapid treatment
- Freedom to express normal behavior by providing space, facilities and company of the animal's own kind
- Freedom from fear and distress by ensuring conditions which avoid stress and mental suffering

For us, the five freedoms should be relatively familiar aims in the care of farmed animals. Access to water and a proper diet are central to care. Shelter from the environment and adequate resting area have been aims of building design. Prevention of disease and injury along with timely treatment are consistently emphasized in veterinary care. The last two aims of normal behavior and absence of fear and distress are discussed with less frequency, but facility design and interaction with humans are gaining more emphasis in animal care discussions. However, failures are also easily recognized on farms. In all farms newborn piglets die due to a lack of inadequate milk availability, weanlings succumb to systematic infections, and gilts are intimidated by older sows.

The use of the term "five freedoms" is much more prevalent in European discussions than in the United States. This may be due to the fact that "freedom" is termed as an absolute in American political discussions. Indeed, it has been suggested that it may better be discussed as the five needs (Gregory, 1988). This definition of the five freedoms as an absolute approach has also been contraindicated by an author who helped develop the five freedoms, Dr. John Webster:

When put to work by comparing different housing systems, the five freedoms are an attempt to make the best of a complex situation. Absolute attainment of all five freedoms is unrealistic. By revealing that all commercial husbandry systems have their strengths and weaknesses, the five freedoms make it, on one hand, more difficult to sustain a sense of absolute outrage against any particular system such as cages for laying hens or stalls for sows and easier to plan constructive, step-by-step, routes towards its improvement (Webster, 2003).

Moreover, the five freedoms, or needs, turns the focus away from housing and towards a focus on day to day care of animals (Edwards et al, 1990). This also emphasizes that there are particular needs of animals when different insults occur. Actually, most of these requirements are easily met on our farms. The main challenge in controversy has been in discussing the fourth freedom. The definition of normal behavior has been argued incessantly, and often with little success. In many cases it is based on a different set of experiences between the critics and the farmers.

A real example is the recognition of boredom. Critics almost invariably argue that pigs are bored in current housing systems, either through anthropomorphism or attributing a cause to stereotypical behavior. What is quite obvious is that farmers do not recognize the same causes. When stereotypic behavior is seen farmers look around for an irritant, and usually find one. The difference is that attributes are driven from one species to another, without recognizing that pigs are sedate and, when comfortable, spent most of their time resting.

The critics have also emphasized visual appraisals. It is not by chance that housing is a major focus as it allows pictures and videos to be made. We have often played into critics hands by emphasizing the same. It is interesting that human measures of welfare have often focused on different aspects. When comparing different levels of welfare by society across the world measures such as infant mortality rates, immunization rates, food availability, longevity, protection from injury and protection from aggression are emphasized. These are familiar emphases in veterinary medicine but often not recognized in farmed animal welfare as true concerns. Perhaps we have used the wrong language describing the challenge is that we face. Perhaps they are also not emphasized as the culpability of the decision maker is the major focus of many welfare critics.

The decision-making process

Everyday decisions must be made concerning the care of animals on the farm. This can involve issues such as housing, standard operating procedures, but also involve individual animal decisions including treatment, euthanasia

or analgesia. We must address the ownership issue head-on as corporate ownership and size does not preclude care as evidenced by our hospitals. Instead, we must emphasize that caregivers are in place and empowered.

It has often been argued that there is an automatic emphasis in animal agriculture on the provision of good care by an emphasis on productivity. The emphasis on productivity is often true as long as the denominator is an animal. There is a real difference between emphasizing average daily gain by pig or by square foot of space. In recent research which we performed at the University of Minnesota, we have illustrated that there are real differences in space allowance and the average daily gain of pigs. We do hit a wall in pig performance when k is reduced below 0.031, and performance as defined by average daily gain is reduced. The definition of k is in the formula:

$$\text{Area required (m}^2\text{)} = k \times W^{0.667}$$

Where:

k = constant

W = body weight (kg)

We have also illustrated that, with reduced levels of space allowance and average daily gain also comes other adverse social effects on the pigs. It appears that average daily gain is a good proxy for the welfare of pigs in this analysis. Likewise, we would expect the same for mortality rates and feed intake.

However, if the productivity measure is not the performance of the pig, but the performance of the facility, then we have not seen the same limit. **Figure 1** emphasizes that we must focus on animal based productivity measures if we are to focus on welfare. When we speak of

pigs weaned per farrowing crate we are speaking about emphasizing a productivity measure that, in fact, compromises the welfare of pigs. The current emphasis on weaning age illustrates that there were real gains in the welfare of growing pigs that can be addressed by manipulating weaning age.

In spite of this focus on housing and management efforts, probably the most underemphasized area of animal welfare is the day-to-day delivery of care. It is not the average pig performance that counts, in many areas, it is the care delivered to the outliers, those animals that may not affect the average. It is an area that we should provide some more emphasis. When I take naïve veterinary students to a large farm, the criticism is not about housing, nor the scale, it is usually about the lack of care for a single pig that has not been treated, removed or euthanized. Euthanized in a pig does not have a direct economic consequence, nor does it have a beneficial effect on the measure of productivity on the farm. Yet it invariably has an effect upon the welfare of pigs.

Inducing proper behavior by measurement is something that is needed in the decision-making process. That is the reason that the frequency of euthanasia is a measurable in the Swine Welfare Assurance Program (National Pork Board, 2003). In it the aim is to have at least 20% of overall mortality being euthanized. This reflects the willingness of the farm to terminate an agonal process. In fact, some have argued that each employee on the farm should be willing and ready to euthanized pigs when needed.

Yet there are real biases in euthanasia practices. **Figure 2** shows the frequency of euthanasia of sows and gilts by day of the week. It illustrates that there is a reluctance or inability to euthanized sows on the weekend, though it is readily assumed that the need for euthanasia is the same

Figure 1: Pen efficiency at different space allowances.

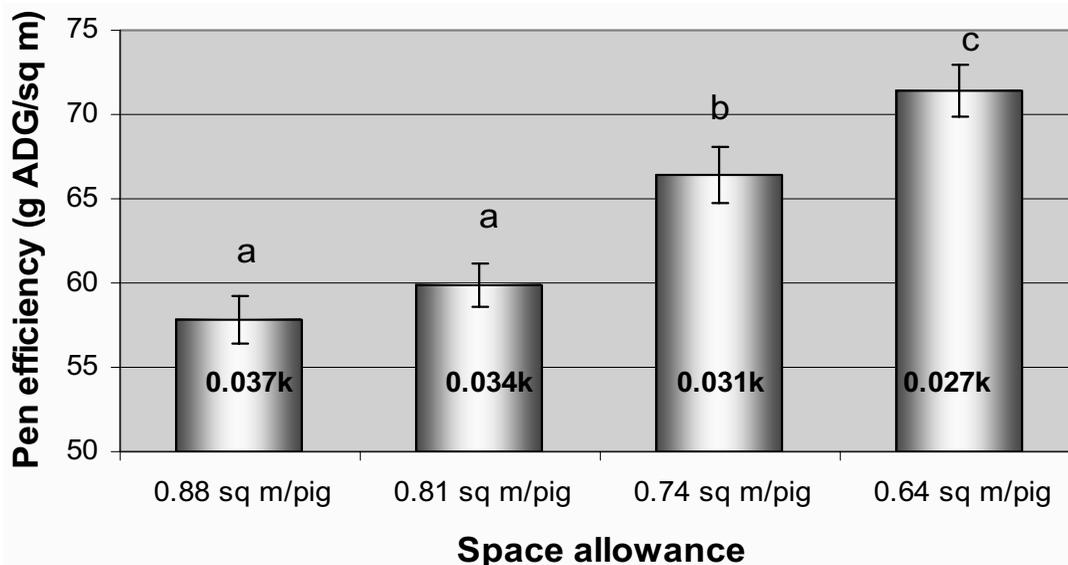
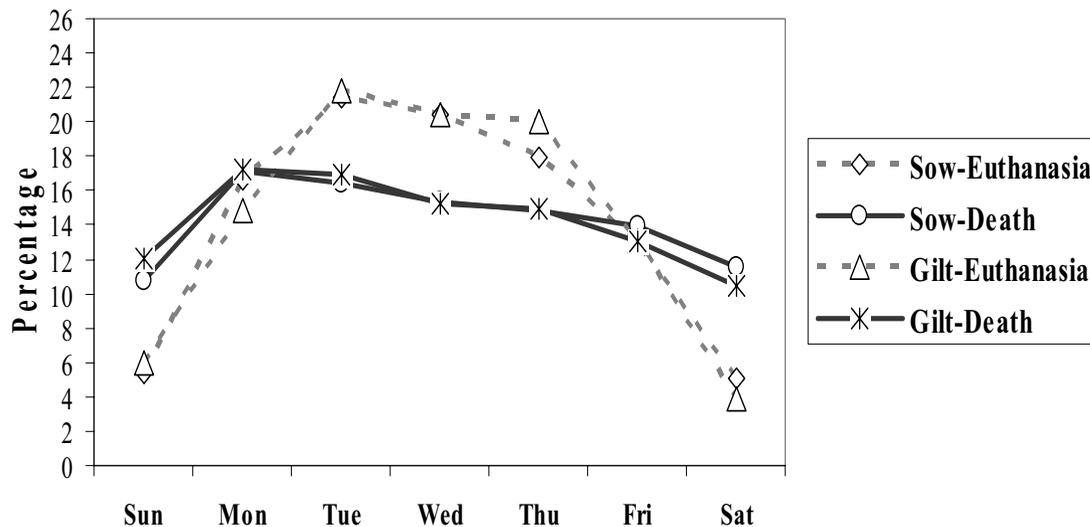


Figure 2: Proportion of silencing kill to euthanized by day of the week.



across all days. We have seen the same with treatment schedules.

Practices such as inspection, treatment, euthanasia have sometimes become postponable activities. When labor supply is low or unskilled, sometimes the care for marginal animals is compromised.

Recently we have looked at the issue of pain in farmed animals. One of the major challenges in communicating treatment regimes to the public is that these regimes are not made on an individual animal basis. The control of disease and painful conditions is based on the wise allocation of limited resources. We use our herd level measure of pain by taking into account three factors. The first is the incidence of painful conditions. The second is the length of time over which they are painful. The third is the intensity of the pain. Each of these factors has different controlling mechanisms. The incidence is controlled by the control of precipitating causes. The length of time is controlled by the promptness of treatment are euthanasia. The intensity of the pain is controlled by managing the pig's environment and by the administration of analgesia.

When we look at it in this manner four things become quite clear. The first is that the historic focus on processing as a major source of pain in the herd is untrue. Chronic pain conditions, such as lameness, downer animals, and painful conditions such as pleuritis should be a major focus. Secondly, euthanasia is the major tool available to producers to control many of these conditions. Thirdly, the use of analgesia for chronic conditions should be ready reevaluated. Finally, disease outbreaks should not simply be considered as financial concerns. We must also present them as real welfare concerns in our animal populations.

Finally, a real empathy should be made in illustrating that the welfare of farmed animals he is a decision made to protect the well-being of pigs while utilizing a limited amount of resources. Many critics are surprised how little farmers receive for their pigs. We must explain that a 250 pound pig should be reared for \$100 and that the dam must be supported in this amount as well. We should emphasize the real successes in providing a protected environment for our pigs. This can include the successes in designing a diet that minimizes mortality, the elimination of many diseases from our herds, and the improvements in transport that have been seen. We should emphasize that superimposing requirements without taking into account their costs will probably detract from these other successes and future improvements.

The communication process

Too many producers think that the burden of proof rests with the critics. In other words, the public must prove that they are wrong before changes should be made. There is currently adequate distrust in the public forum that this burden of proof now rests with producers. We must illustrate that animal agriculture he is acting responsibly, and when there are irresponsible actions taking place, the community will respond.

There are three things that should be illustrated to the public. They are intent, knowledge, and responsibility. Animal agriculture must illustrate that they do care. This is done by illustrating and emphasizing the caregivers on the farm. It is by saying that there is a human animal interaction that is positive. Secondly, we must illustrate that there is a knowledge base to address the welfare needs of the animals. We must not allow the "welfare experts" to be people that are not regularly on the farm. Sometimes by emphasizing scientific processes we externalize the

John Deen, Leena Anil, Sukumarannair S. Anil

knowledge base and lose control. Thirdly, we must take responsibility for the good and bad that he is on the farm. This means going to too many meetings and responding to the concerns of the public. This means admitting to problems when they occur and asking for help. For instance, PRRS should not only be represented as a financial burden. It should also be represented as a welfare burden upon the pigs.

There are those critics that will never give an inch, that are sustained by criticism rather than cooperation. That is not the bulk of the concerns presently seen. We must be able to provide a broad and comprehensive explanation of how our decisions, and our successes and failures.

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