

WELFARE DRIVERS OF PRODUCTION PRACTICES: WHERE IS THE ANIMAL SECTOR GOING?

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<http://www.grandin.com/welfare/corporation.agents.html>

In 1996 I conducted a survey for the USDA in handling and stunning practices in 24 federally inspected plants in 10 different states. Ten beef packing plants were surveyed. Out of these 10 plants only 3 of them (30%) were able to stun 95% or more of the cattle with a single shot (Grandin, 1997a). Four plants (40%) did poorly due to poor maintenance of stunning equipment. There was much evidence of a lack of management supervision in the stunning room. In three beef plants (30%) there was severe abuse of cattle. There was excessive use of electric prods, paralyzing bulls with electricity to hold them still and shoving downed, crippled cows with a forklift (Grandin, 1997a). Conditions improved greatly when McDonald's Corporation started their plant auditing program.

MCDONALD'S AUDITS

In 1999 McDonald's Corporation started auditing handling and stunning practices in the plants that supply them with beef. They used a scoring system that I developed for the American Meat Institute (Grandin 1997b) and I trained the HACCP food safety auditors from their grinder suppliers to do handling and stunning audits. The results of the McDonald's audits clearly showed huge improvements (Grandin 2000). Now 90% of the plants were able to stun 95% or more of the cattle with a single shot (www.grandin.com, www.mcdonalds.com). Most of the very abusive behavior of employees has stopped and in many plants electric prod use has been reduced or eliminated. Electric prods have been replaced with other driving aids such as flags. The year 2000 audits clearly indicated that the improvements have been maintained.

I have been working in the meat industry for more than 25 years and I saw more improvements in 1999 than I have seen in my entire career. I have designed handling facilities and have consulted on animal handling for most of the major meat companies. During 1999 I visited 27 pork and beef plants to conduct McDonald's audits and train auditors. The good news is that the vast majority of plants did not have to make expensive capital improvements to pass the audits. Small changes such as installation of a non-slip floor grating in a stunning box or changing lighting to reduce the frequency of animals balking and backing up were often the only equipment changes needed (Grandin 1998c, 2000b). Over half of all the improvements were brought about by motivating management to actively supervise handling

and stunning. There were also benefits in reduced bruises, less PSE (pale, soft and exudative pork) and fewer gaps in the production line.

The industry became serious about improving handling and stunning after McDonald removed one large plant from the approved supplier list and suspended several others for varying lengths of time. Both McDonalds and Wendys are conducting audits of handling and stunning. During my travels in the U.S. I have observed that the cleanliness of meat plants is better in plants that are audited by McDonalds or Wendys compared to plants that are not audited. Audits by restaurant companies have raised both food safety and animal welfare standards.

HANDLING AND STUNNING AUDIT PROCEDURES

The American Meat Institute guidelines use a critical control point approach for objectively scoring handling and stunning. This objective method provides more uniform results between different auditors than welfare audits that contain no hard data. Depending on the size of plants, 50 to 100 cattle or pigs are scored on the following variables:

1. Percentage of animals stunned correctly on the first attempt.
2. Percentage of animals that remain insensible and unconscious on the bleed rail. Fail if less than 100%.
3. Percentage of cattle that vocalize (moo or bellow) during movement through the chutes and stunning. Vocalization is a measure of distress or aversive events such as being prodded with an electric prod or missed stuns (Dunn 1990, Grandin 1998b, 2001, Warriss et al., 1994, Watts and Stookey, 1998 and White et al., 1995).
4. Percentage of animals prodded with an electric prod.
5. Percentage of animals that slip or fall.

Each variable is scored on a yes/no basis for each animal. The auditors also walk through the yards and unloading area and note problems with poor maintenance, overcrowded holding pens, slick floors, etc. A good auditing system should have a combination of hard data scores and a more subjective “walk through” evaluation. The American Meat Institute has conducted training seminars on handling, stunning, and implementing the guidelines during the last three years.

THIRD PARTY AUDITING

Currently each restaurant company is conducting their own audits for both food safety and animal welfare. In other countries, auditing companies have been formed to perform the audits so that a plant is not inundated with auditors from many different companies. Third party auditing will evolve. Currently, I have compiled data from the last two years of McDonald’s audits and have published a summary of the results which presents an overall state of the industry. Individual plant names are kept confidential (www.grandin.com). During 2000 and 2001 I have continued to work with several companies to train auditors. To keep

this auditing system calibrated, I plan to pick several meat plant names at random from their restaurant supplier lists for audits that I will conduct. I favor random choice of these calibration plants so that my knowledge of the industry does not influence where I go.

WHAT WOULD THE PUBLIC THINK?

Being a practical person I base standards of animal treatment on what would the general public accept. I have taken many non-meat industry people to a well run slaughter plant and most people found it was acceptable. It is essential to fully explain disturbing sights such as stunned animal movement. It is important that the visitor has the opportunity to watch cattle going up the ramp for at least 15 minutes so that they see that the cattle remain calm. Producers need to ask themselves what would the public think? How would ten people picked at random from an airport or bus station react to animal rearing, transport or slaughter practices?

My background in working with animals is in cattle and pigs. When I visited a large egg layer operation and saw old hens that had reached the end of their productive life, I was horrified. Egg layers bred for maximum egg production and the most efficient feed conversion were nervous wrecks that had beaten off half their feathers by constant flapping against the cage. Half naked hens are not going to be acceptable to most people. This operation would fail the people from the airport or bus station test.

I showed a picture of the half naked spent hens to over 100 undergraduate students in animal science and biology classes. Before the slide was shown I asked the students to vote for one of the following categories: 1) totally ok, 2) somewhat disturbed or 3) totally grossed out. The students voted two-thirds somewhat disturbed and one-third totally grossed out. One girl raised her hand and said, "I worked at layer farms, those are good spent hens." Only one biology student thought the spent hens were totally ok. When I showed the pictures I was careful not to bias the students. I explained the voting categories while I was showing a slide of nice looking young hens in a battery cage.

Some egg producers got rid of old hens by suffocating them in plastic bags or dumpsters. The more I learned about the egg industry the more disgusted I got. Some of the practices that had become "normal" for this industry were overt cruelty. Bad had become normal. Egg producers had become desensitized to suffering.

There is a point there economics alone must not be the sole justification for an animal production practice. When the egg producers asked me if I wanted cheap eggs I replied, "Would you want to buy a shirt if it was \$5 cheaper and made by child slaves?" Hens are not human but research clearly shows that they feel pain and can suffer.

Need for Balanced Approach

Fraser (2001) states that some scientists who defend animal practices tend to gloss over the ethical issues. He provides the example of North and Bell (1990) which is a textbook on egg

production. This book fails to address the ethical concerns of the death losses which occur when feed deprivation is used to force molt hens. Fraser (2001) is a very thoughtful and objective article which discusses the need to obtain accurate information and to stop simplistic polarized views on both sides of welfare and environmental issues. Below is the abstract of Fraser's paper.

“A growing popular literature has created a “New Perception” of animal agriculture by depicting commercial animal production as 1) detrimental to animal welfare, 2) controlled by corporate interests, 3) motivated by profit rather than by traditional animal care values, 4) causing increased world hunger, 5) producing unhealthy food and 6) harming the environment. Agricultural organizations have often responded with public relations material promoting a very positive image of animal agriculture and denying all six of the critics' claims. The public, faced with these two highly simplistic and contradictory images, needs knowledgeable research and analysis to serve as a basis for public policy and individual choice. Scientists and ethicists could provide such analysis. In some cases, however, scientists and ethicists have themselves produced misleading, polarized, or simplistic accounts of animal agriculture. The problems in such accounts include the repetition of unreliable information from advocacy sources, use of unwarranted generalizations, simplistic analysis of complex issues, and glossing over the ethical problems. The New Perception debate raises important and complex ethical issues; in order to provide useful guidance, both scientists and ethicists must consider these issues as research problems that are worthy of genuine investigation and analysis.” (Fraser 2001)

Minimum Decent Standards

Throwing live hens in the garbage is a practice that the vast majority of the public would condemn. I predict that animal welfare standards will evolve into two categories - a minimum decent standard for large scale commercial use and higher welfare standards for niche markets with higher income consumers. Throwing live hens in the trash violates most people's idea of minimum decent standards. It is my opinion that the new McDonald's standards for egg laying hens are a minimum decent standard that the egg industry really needed. Previously each hen was provided with the space equal to a half of sheet of paper. The new space standard for caged layers provides enough space for all the hens to roost at one time and feed deprivation to induce molting is banned.

An example of a higher welfare standard for hens would be free range hens. The acceptable ratings published in the American Meat Institute guidelines is another example of a minimum decent standard. Minimum decent standards need to be implemented worldwide.

THE SOW STALL QUESTION

Whereas throwing live hens in the trash or beating an animal are clear-cut violations of most people's idea of a minimum decent standard the issue of sow stalls is less clear-cut. I conducted informal conversations with airline passengers who sat beside me on the subject of sow gestation stalls. People are disturbed by the fact that the sow cannot turn around. A

typical comment was it just “does not seem right.” Each passenger was shown photos of gestation stalls and pictures of pigs housed in groups on a concrete slotted floor. Most people thought that the pigs on the concrete slotted floor were acceptable. Opinions on the gestation stalls were: 1/3 (no opinion); 1/3 (mildly opposed) and 1/3 (very opposed to the stalls) which prevented the sow from turning around.

There are many issues where decisions will have to be made to determine what will be acceptable for a minimum decent standard. Science can provide many answers, but ethics must also be considered. It is my opinion that an animal not being able to turn around for most of her life is not going to be acceptable to the public.

Barnett et al. (2001) provides an excellent review of the scientific literature on welfare of sows in different housing systems. This paper has over 200 references. They conclude that “the consequences for welfare of housing pigs in stalls for varying durations should be evaluated. Because stalls housing is a controversial issue from the view of public perception, but may have reproductive and welfare advantages, housing in stalls for a defined period that is considerably less than the period of gestation may be a reasonable compromise.” The main criticism I have of Barnett et al. (2001) is that genetic factors on behaviors such as aggression are not reviewed. Indoor group housing systems are likely to have greater success if less aggressive types of pigs are used. The author has observed that different genetic lines of group housed sows in the same building will have different amounts of injuries and abnormal behavior such as belly rubbing and ear sucking. Large groups of over a hundred sows may help reduce aggression. The author has observed that large groups of over a hundred finishing pigs, which have been mixed from different pens, engage in relatively little fighting. After the pigs arrive at the packing plant, they usually lie down quickly. There is a need for research on genetic factors. However, practical experience has shown that group housing systems will be more successful if pig genetics is taken into consideration.

SUMMARY

- Corporate purchasing power has been used to greatly improve conditions for animals.
- The American Meat Institute guidelines are being successfully used to objectively score conditions in slaughter plants by McDonald’s and Wendy’s. A good auditing system uses a combination of objective scores and subjective measures.
- Animal welfare standards will evolve into two categories:
 - Minimum decent standards which would be acceptable to most members of the public. Examples – McDonald’s laying hen guidelines and American Meat Industry guidelines at the acceptable level.
 - Higher welfare standards for niche markets with higher income consumers such as free range hens.
- Improving welfare during handling, slaughter and transport is a win-win situation, where there is often an economic advantage. A combination of audits and incentive programs can be used to reduce damage to animals.
- Implementing minimum decent standards for animal production may have economic costs and reasonable economic costs should be considered a cost of doing business. Both

scientific data and ethical concerns should be used to make decisions about animal housing.

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