It is Meet and Right So to Do. Considerations in the Humane Treatment of Low Value Livestock

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Let us give thanks un-to the Lord our God.

*It is meet and right so to do.*
It is very meet, right and our bound-en du-ty,
That we should at all times and in all places give thanks un-to thee..

Church of England, Eucharistic Prayers, Order one (Traditional)
Prayer A
President's Edition of Common Worship pp686

Abstract

“Welfare slaughter” is a European term used in Foreign Animal Disease eradication efforts to describe non-infected livestock killed with government compensation during the operational response. Welfare slaughter has been identified as repugnant to the general public and the source of serious public debate on the sustainability of agriculture systems in Europe in the wake of Classic Swine Fever in the Netherlands and Foot and Mouth Disease in the United Kingdom. Welfare slaughter is operationally an economic necessity. In emergency situations where export markets are closed the “true” value of animals is negative due to loss of market access and there is often no hope that the market will recover in time for trade to normalize. In such economic reality the owner can not afford to feed the livestock. In addition, overcrowding can occur in intensive farming situations. Severe market depression can result in a similar situation in the absence of border closure. This paper will report an equine case study in Manitoba where welfare slaughter was an obvious option and discuss the difficulties in dealing with animal welfare cases involving livestock of low or no value.

Case Report:

At the end of April 2004, forty-five mixed age, breed and sex horses were identified in distress, removed from the owner’s custody and relocated to a commercial feeding facility. Transportation required a ride in a single deck gooseneck trailer of slightly over an hour. At the feeding facility animals were processed through a chute, back tagged, photographed and body condition scored (BCS) from 1-9 as previously described (1).

Individuals within the group were very thin with a mean BCS of 1.9 (SD 0.67), with 10 animals initially scoring 1, 31 animals scoring 2, two individuals scoring 3 and two
individuals scoring 4. There were five males, 3 studs and 2 geldings, and 40 mares, 16 open and 24 in foal as estimated by udder development and abdomen size.

As far as could be determined from interview of the original care giver; the horses had not been segregated by sex in the previous year and survived the winter primarily consuming clean wheat straw of the most recent harvest. Recent vaccination and anti-parasite treatment could not be determined with any degree of confidence, but was considered unlikely. The general thin condition and full abdomen of individuals in the group was consistent with lack of capacity for individuals to consume enough straw to meet daily minimum energy requirements and gut adaptation to long term low energy diet. Initial feeding commenced with a free-choice forage diet starting with medium quality long stem hay with the intent to proceed with better quality feeds as the horses adapted.

Ten days after introduction of free choice hay, limited feeding of locally available barley-corn silage was introduced. Observer impression was that the initial acceptance of the silage was associated with horses in better body condition at the time of relocation. No colic, diarrhea or other digestive upset was identified in any individuals during the 50 day re-feeding period. An outbreak of upper respiratory disease associated with nasal discharge and increased respiratory rate affected about 1/3 of the individual horses between day 5 and day 10 of the re-feeding period.

Chronically starved horses frequently respond poorly to re-feeding even with diets designed to restrict immediate carbohydrate availability (2-4). About 20% of severely malnourished horses can be expected to die in spite of attempts at re-feeding (2).

Nine horses in this group of 45 died 7.9 + 6.3 days subsequent to the initiation of re-feeding (range 1 to 19 days) (Table 1). Three horses identified as having difficulty rising on the date of transport did not become recumbent during transport but died within 48 hours. One mare (BCS-2) died during parturition 11 days subsequent to movement. One clinically affected stud (BCS-2) died during the outbreak of upper respiratory disease. Death in the other 7 horses was characterized only by progressive weakness and difficulty to rise while maintaining a moderate interest in eating. Weak horses unable to rise after 24 hours (2 of 7) were humanely euthanized. All the animals which died retained back tags to the point of death and were positively identified. Post mortem examinations were not done.

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<tr>
<th>Initial BCS</th>
<th>Survived</th>
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<tr>
<td></td>
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<td>BCS 1</td>
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<td>6</td>
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<td>BCS &gt;1</td>
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<td>30</td>
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<tr>
<td>Total</td>
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After 50 days of feeding the 36 surviving animals were reprocessed as previously described and body condition scored by the same individual. No discussion of the value of the previous BCS occurred during the second scoring exercise. Horses were identified by comparing individual photographs from the two scoring exercises. At this second evaluation the mean BCS of this survivor group (n=36) had increased from 2.0 (SD 0.68) to 2.6 (SD 1.02), with 14 individuals not changing score, 15 improving 1 BCS, three improving 2 BCS, and one improving 3 BCS. Three animals initially scored as BCS-2 scored BCS-1. This generally unremarkable response to a significant time period of re-feeding is consistent with previous information indicating that recovery of severely malnourished horses to an average body condition may require between 6 to 10 months (4).

Statistical analysis was done in a computer spreadsheet program (Excel, Microsoft Corporation), odds ratio and confidence intervals were calculated as previously described (5). In considering the mares as a separate group, pregnancy status was not associated with subsequent mortality (OR 0.14, 95% CI 0.23-5.62). Five of the 24 mares in foal had foaled by day 50 and 3 of the foals survived more than 72 hours. A trend was identified for individuals having an initial body condition score of 1 to be more likely to die during the re-feeding period than individuals scoring 2 or better ($?^2 = 3.21, p<0.10, 1$ df, OR 4.0, 95% CI 0.82-19.4).

Economic considerations were identified as a contributing cause of this incident. The price of feeder horses in Manitoba had depreciated significantly in the 2 years prior to this event, simultaneous with the reduction in the pregnant mare urine industry. Feeder horses in western Canada, depending on body condition and type generally sell for $250.00 to $350.00 less than slaughter value. Feeder horses are sold at public auction and weekly trends in selling price are known. The price of Canadian slaughter horses is not readily available as they are generally sold by private treaty or other long term contractual arrangement. The market price of US origin horses for immediate slaughter is public information and the 2003-2004 average price was depreciated by 35-40% over 1998-2001 average price (6) (Figure 1), with the most recent decline a continuation of a previous trend. Total number of horses slaughtered in Canada per year has not changed significantly during the period 1998 to 2004 remaining around 62 000 animals, with about 40% of United States origin (7).

In the years 1998-2001, 400kg youthful, good meat type, feeder horses in a BCS of 4-5 would sell at Manitoba auction for $650.00. During the spring of 2004 this type of horse was being sold at auction for between $150.00 and $180.00, thin horses and cull breeding stock sold for less.

Detailed financial accounts of the cost of this enforcement action were kept and the cash cost per horse seized and held for 50 days including transport, carcass disposal, lariage, feeding and medication and parasite treatment was $226.76. No cost estimate was made for officers involved in the management of the case. Only about a quarter of the cash cost was recovered from the sale of the horses at the end of 50 days maintenance (mean value recovered was $54.72 per survivor).
Figure 1  Horses slaughtered in Canada by year. Black solid bar is number of horses imported for immediate slaughter from the United States, left-Y-axis (6). Grey bar is the total number of horses slaughtered in Canada, left-Y-axis (7). Open bar is average per horse value of US origin slaughter horses per year (6) adjusted to 2004 Canadian dollars using the Bank of Canada inflation calculator available at http://www.bankofcanada.ca/en/inflation_calc.htm, right-Y-axis. The 2004 price data is from Jan-May only. Stable annual import volume from the USA over this time period would suggest there has been an equivalent drop in slaughter horse value in the northern US states as has occurred in Canada.

Discussion
This case raises some significant ethical problems for animal welfare agencies in the handling of low value malnourished commercial animals. At the time of seizure the horses were identified as grade animals of low monetary value and a financial deficit in managing the case had been anticipated. The financial loss could have been minimized by immediate euthanasia of a portion of or all of the animals. The enforcement officers’ reluctance to recommend mass euthanasia of otherwise healthy horses was based primarily on personal aversion. Aversion to the killing of healthy animals is common within the veterinary profession (8).

Mass euthanasia may be the prudent option for seized livestock in instances where the market value of the animals is so low that feeding the animals until slaughter fit is
economically impossible. This situation can occur as a result of drought or similar natural disaster where stock is in poor condition and feed prices are high (9). Australia in areas of recurrent drought has developed “feed for survival” strategies. Precipitous drop in livestock market prices result where there is a disruption in market channels due to trade embargos and this situation has been recently reviewed (10).

When questioned and previously encouraged to sell animals the owner refused to take his horses to market and “have them stolen at auction” (direct quote). If US import slaughter values are accurate, then this individual maintained a persistent false belief that his animals were worth more than similar horses were sold for at public auction.

*Moral and Ethical Issues:*

1. **Legal Obligation**
   The legal obligation for caregivers under the Manitoba Animal Care Act is the provision of adequate feed, water and shelter, relief of pain and distress and the provision of veterinary care. Most of this legal obligation was transferred from the original owner to the feedlot operator at the beginning of the feeding period via a service contract. Veterinary care obligations were assumed by the provincial veterinary inspector. In this case, treatment options were constrained by the number of horses involved, uncertainty as to the benefits of more aggressive treatment, uncertainty to which individuals were most critical affected and financial constraints on the agency. The best veterinary care for the malnourished horse is not well documented, and general published guidelines were followed (2-4).

2. **The Killing of Healthy Animals**
   In companion animal practice the euthanasia of healthy animals is an issue of ethical debate (8). The killing of healthy animals in disease control operations has been reviewed from both a technical (11) and a political (12) perspective. A recently published report about the societal and ethical acceptability of killing animals in the Netherlands found that the killing of healthy pets and horses is less acceptable than the killing of healthy farm animals (13). This is because society ascribes a different social status to dogs, cats and horses than to animals kept for production purposes. In the Netherlands, killing domestic animals is legally prohibited, unless there are morally defensible and legitimate grounds for doing so. The principle upon which Dutch law is based assumes that terminating animal life is not a neutral moral act and requires moral justification (14). Although not enshrined in law in Manitoba, this principal was adhered to in the handling of this case.

In this Manitoba example the lead inspector did not recommend the available option of immediate euthanasia even though from the onset of case management it was apparent that eventual sale of the animals was unlikely to cover the cost of seizure and re-feeding. In discussion with peers it was felt that immediate mass euthanasia was sufficiently repugnant under the conditions in which the animals were found that the Minister of Agriculture would never entertain it. In addition, the individuals involved found the suggestion of mass euthanasia personally repugnant.
3. Veterinary Obligation
The American Veterinary Medical Association has adopted Guidelines for Professional Behavior in their 1997, *Principles of Veterinary Medical Ethics* Guideline #2 States:

*Veterinarians should consider first the welfare of the patient for the purpose of relieving suffering and disability while causing a minimum of pain or fright. Benefit to the patient should transcend personal advantage or monetary gain in decisions concerning therapy.*

This statement has led to enthusiastic discussion within the profession as to what is the prior obligation; does the veterinarian serve the interests of the human client or is the proper role of the veterinarian to be an advocate for the animal. There are moral hazards on both sides of the argument. If the veterinarian responsibility is only client based, then in livestock production systems some level of animal discomfort is justified to reap substantial increase in profitability of the system. On the other hand, if the veterinarian assumes an extreme animal advocate position, then almost any manipulative or near coercive sales practice is justified to assure the patient the longest life or best care. This second conviction spawns a business model resulting in diversification and proliferation of treatment options, excellent practice profits and the near elimination of humane euthanasia.

The Veterinary medical oath adopted by the Canadian Veterinary Medical Association places a dual and more balanced obligation on the Professional and states:

*As a member of the veterinary medical profession, I solemnly swear that I will use my scientific knowledge and skills for the benefit of society. I will strive to promote animal health and welfare, relieve animal suffering, protect the health of the public and environment, and advance comparative medical knowledge.*

This oath places a “public servant obligation” on all veterinarians in Canada not just those who work for the various levels of government.

In this case scenario the client is the general public with limited financial resources to assure animal welfare across the province. The patient is the specific animals seized in this case. The handling of this case would suggest that respect for the animals’ right to a chance for survival (and foaling) and the belief in the mind of the inspection team that this personal conviction was shared by society at large, outweighed the public servant obligation to minimize public expense.

4. Common Morality: They shoot horses don’t they?
In Canada, we slaughter horses for human consumption primarily for the export trade. Therefore the humane killing and use of a horse for human food is currently an accepted activity. If the carcass of the horse is to be used for food then the killing is morally justified.

Common morality theory takes its basic premises from the morality shared by the members of a society; that is, unphilosophical common sense and tradition (15). Canadian common morality about the way things are includes the convictions that: animals are meant to serve the interests of people, meat is a key element in the human
diet and the practice of farming to generate food for human consumption is a valuable contribution to society. Evidence in support of this common morality is that it describes the current practices of livestock production and human food choices in Canada.

The common morality of humane livestock production practices is focused on the concerns for quality of life for the livestock involved and not length of life.

Many individuals and groups are opposed to the slaughter of horses for human consumption and there is little to no market for horse meat in Canada. Some North American groups have successfully lobbied for the prohibition of the sale of horses into the meat trade as has California (16), and a similar initiative is underway at the national level in the United States (17,18). The complete loss of the horse meat trade or prohibition of slaughter could be expected to further depress the value of cull horses. In this Manitoba incident, low market value was identified as a primary contributor to the animal welfare situation presented.

5. Responsible Use of Public Resources
The Manitoba Animal Care Act is quazi-criminal legislation focused on identifying and correcting prohibited human behaviour. There are consequential provisions for the relief of suffering for animals found in distress; however, animal rescue is not the primary purpose of the legislation. In this case, low commercial value constrained the options for management of affected animals.

At the time of seizure, the animals were in such questionable condition that they were unfit for presentation at public auction and the identified caregiver was uncomfortable owning animals which were at immediate risk for death. The horses could not be given away at the time of removal. Monies used in stabilizing the group of horses was public funds immediately drawn from the budget intended for enforcement and inspection activities. In fact, any expenditure of public resources requires justification in direct competition with commitments to other public goods like health care and education.

The question remains did society actually sustain an acceptable cost-benefit from the action taken.

Conclusion
Animal welfare enforcement is an emotive workplace where personal conviction and public opinion both come into play. The balancing of personal conviction and public mandate will always result in a decision surrounded in uncertainty. Open discussion of animal welfare issues in livestock production systems can only help to clarify and articulate to common morality of Canadians.

Knowledge of the value of livestock seized is important to the management of those animals under animal welfare enforcement situations. In this example situation, this information was available and there was no reason to believe that the eventual market value of these slaughter horses would offset the costs of feeding. The obvious option to
immediately kill the animals was overridden by the novelty of the situation, considerable uncertainty in the outcome and the cultural reluctance to act in this manner.

In situations of abandoned very low value livestock, immediate humane destruction and disposal may be the public policy that although unpleasant, is very meet, right and our bounden duty so to do.

References
6. Agriculture and Agri-food Canada, Canada’s Imports from the United States, Horses for Slaughter, International Trade Statistics, International Issues Team, 930 Carling Avenue Ottawa, Ontario K1A 0C5