

**Review of Horse Slaughter Footage**  
**Bouvry Exports in Fort Macleod, Alberta; and**  
**Viande Richelieu in Massueville, Quebec**  
by  
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**Biographical Sketch**

A native of Alberta, Canada, Debi Zimmermann graduated from the Western College of Veterinary Medicine (WCVM) in 1988. In addition to her doctorate degree, she has a degree in Biology with a specialization in Zoology (University of Alberta), and a diploma in Animal Health Technology (Northern Alberta Institute of Technology). Her experience in wildlife includes rotations in Wildlife Medicine and Exotic Animal Medicine, work on a Peregrine Falcon breeding project, as well as a course in wildlife immobilization.

Dr. Zimmermann owned and operated a companion animal practice for 14 years, and was one of the few veterinarians in Alberta, who accepted “exotic” patients such as rabbits, rodents, ferrets, reptiles, amphibians, and wildlife. Her practice had a strong focus in chronic pain management, preventative medicine, and quality of life issues. Global Television named Dr. Zimmermann Woman of Vision for January 2002, after she rebuilt her practice following a devastating fire during which she entered the burning building just in time to rescue the 11 animals under her care at the time.

Over time, Dr. Zimmermann became increasingly aware of the amount of animal suffering that extended far beyond her doors. After twenty years of sharing the care of animals on a one-on-one basis, she sold her veterinary practice to focus on animal welfare advocacy issues, and is working towards preventing the suffering of animals on a global scale.

Dr. Zimmermann is a member of the Canadian Veterinary Medical Association, the Alberta Veterinary Medical Association, the Edmonton Small Animal Veterinary Association and the International Veterinary Academy of Pain Management.

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## INTRODUCTION

The following assessment follows a comprehensive review of video footage filmed in early 2010, representing a random day's operation at two Canadian horse slaughterhouse facilities; Bouvry Exports in Fort Macleod, Alberta, and Viande Richelieu Inc. in Massueville Quebec. During the periods reviewed, 187 horses were processed at Bouvry Exports, and 100 horses at Viande Richelieu.

By nature, horses are considered "high-fear prey animals". With respect to prey species, horses are classified as "flight" animals. Where other herding prey species, like cattle and sheep, will bunch together upon sensing danger, horses will flee. Novel rapid movement, i.e. a sudden unfamiliar or fast movement that the horse is not expecting, is what sets off this flight response in horses. If a new sensation or item is introduced too quickly, horses will panic. With vision as their most important sense, they are considered hyper-sensitive to novel, visual stimuli. As flight animals, anxiety levels increase dramatically if they are confined in small spaces with no apparent escape route. Hearing is considered to be their next strongest sense, followed by smell. Horses, like all herding species, are social animals, and will panic when separated from their "herd".

## PSYCHOLOGICAL STRESS

As a prey species, horses are naturally fearful and suspicious of anything they have not been conditioned to accept. All things at these slaughterhouses would fall into the category of unnatural, fear-producing stimuli; not the least of which is the vocalizations of fearful horses, the strange plant workers, the metal chute systems, the loud droning of machinery, the blaring music (at Bouvry), horses being felled in-front of or beside them (Richelieu), the smell of warm blood in the stun box and that spewing from the throats of horses only a few feet away from them, and the stench of excrement in high concentration in the chute system that is released from fearful and dying horses.

Fear responses were indeed noted on the video footage from both of these slaughter facilities, and included; switching of the tail, high head carriage, sweating in absence of exertion, licking, showing the whites of the eyes, rapid breathing, anxious fidgeting, kicking out, bucking, backing up, flaring of the nostrils, craning their necks around, high-pitched vocalizations, pawing, and a nervous mane shiver/shake. Fear responses were escalated by handler impatience and inattention, by loud shouting and arm gestures, and excessive use of the whip and electric prods.

Some horses at both operations, were left in the kill chutes for excessive amounts of time, during which they became increasingly more anxious. Every second a horse must remain isolated and confined in a strange situation, can be agonizing. Many horses were left over 3 minutes prior to being shot, including one horse left while workers hosed down the kill floor and went for their 10 minute break (#75), and one horse at Richelieu (Horse #1) which was left in the stun box for 20 minutes. One obviously panicked horse at Richelieu, flailed about in the stun box for nearly 3 minutes, before the shooter finally attended to him.

## PHYSICAL INJURY

The horses processed at these slaughterhouses also suffered needless physical injuries, arising from inadequate facility design, shooter inaccuracy, and willful acts of abuse at the hands of plant personnel. Traumatic injuries were sustained in the following ways:

### Slips and Falls

Slips were numerous at both plants, and they increased in frequency as the stun box floor became more and more soiled as the day progressed, as the speed of processing increased, and with repeated bumping of the horses using the side of the chute (Bouvry). Although many horses were seen slipping, 16% of horses at Bouvry actually fell to the ground (often multiple times), and 3% of the horses at Richelieu fell, some falling over and over for up to a minute and a half.

### Fractures

Fractured pasterns were noted in 3 horses (#33, 45, 116) and it is likely that horse #17 at Bouvry also sustained a fracture on the leg wrapped with a white flag.

### Mis-shots

A significant and unacceptable number of mis-shots, were observed throwing horses violently to the ground, into the sides of the stun box, and some onto their backs. Only a few of these mis-shot horses were afforded a second shot.

### Bleed Rail Sensibility

At Bouvry, many horses demonstrated voluntary movements, or obvious rhythmic breathing, upon being suspended. This indicates these horses were likely conscious as they were being hoisted high into the air with one leg bearing their entire weight, and while their necks were slashed on both sides (which entails using a sawing motion of the knife). A full bleed out takes minutes, and as some horses had their feet chopped off within 45 seconds of the throat slash, some horses may also have experienced the pain associated with this procedure as well.

At Richelieu, horses were out of view as soon as they were shackled. However, given the shooter's high level of inaccuracy, and the mayhem that was heard emanating from the kill room at times, it is highly likely that horses # 3, 34, 43, 53, and 67 regained consciousness post-stun, and possibly horses #22, 39, and 50 as well.

(In my assessment, an animal can still be considered "insensible" while convulsing or "padding" after being stunned, however voluntary movement i.e.: lifting of the head, bending the neck away from the pull of gravity, a full body shiver, or kicking out a leg in response to a distant stimuli (i.e.: throat slash), indicates brain engagement).

### Willful Abuse

While the handling of the horses prior to entering the stun box was not visible on the footage from Bouvry, it should be noted that vocalizations of horses off-camera were excessive.

At Richelieu, horses were routinely subjected to excessive whippings on their bodies, excessive use of electric prods (both stick and hand-held), and some struck repeatedly across their faces (i.e.: Miniature horses).

Horses at Richelieu were also unnecessarily traumatized by the shooter. Examples: he pulled on the tail then shouted at and shoved a horse who began vocalizing several hours after being penned next to the stun box; he often forced the overcrowding of horses in the kill-line which caused panic as they scrambled, piled up on one another, and/or slipped and fell; he whipped horses in the kill-line who had no where to go; several times he forced 2 horses to occupy the stun box designed for a single individual; he felled horses directly in front of, or beside another horse; as a result of his inattention to the task, horses backed out of the line, requiring the already panicked horses to be re-assembled under duress a second time; he allowed a horse that became cast in the stun box, to flail about for almost 3 minutes while he carried on a casual conversation with a co-worker; he forced horses to step over the legs of fallen horses which had not yet been removed from the now very crowded stun box, and, he led horses through improperly closed gates on which they subsequently struck their heads. The shooter also whipped an older and obviously lame horse (#93) 19 times.

## FACILITY DESIGN ISSUES

### Stun Box Design

The stun box design at both establishments was poor, as one size had to accommodate a wide variation in equid size; from Shetland ponies, to donkeys, to warm bloods, to draft horses. The stun boxes become progressively more soiled as the day goes on. The risk of slips and falls therefore increased over time. Although the kill floor was cleaned routinely, the stun boxes were not.

The stun boxes do not provide what would be considered proper restraint (see "euthanasia by firearm" section).

### Worker Safety

The release of a projectile(s) by a rifle or shotgun poses a potential danger to animals and humans in the vicinity.

During the Richelieu footage, a co-worker or by-stander was either next to, or within a few feet of, the shooter on 4 occasions. The door to the kill room is adjacent to the stun box, and opens directly in line with the head gate where the shooter takes aim. Several times during the day, people pulled the door ajar and walked through into what would be the sight line of the shooter. When Horse #100 was in the stun box, a male co-worker put his head through a crack in the door as the shooter was lifting his rifle to shoot at a horse in his direction. The

head stall configuration of the stun box had numerous metal cross-bars on which the bullet could potentially ricochet. The vertical central bar required the shooter to shoot off center.

At Bouvry, a worker sustained serious injuries from a kick by horse # 175 which was already suspended, and obviously improperly stunned.

#### Issues with Euthanasia by Firearm

The accepted method of delivering euthanasia by firearm is described in many references including this excerpt from the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA):

*“The weapon should be fired with the muzzle close to the head (but not against the skull) at the correct location and in the required direction to ensure that the shot penetrates the brain and does significant damage (2). It is essential that the horse be properly restrained. A number of calibers can be used, including: a rifled slug fired by a shotgun (410 gauge or larger) and rifles (including .308 and .223), when placed 1-2 inches from the skull. The smaller caliber .38 police service revolver or .22 calibre long rifle may render the horse unconscious but may not be lethal and may require exsanguination (bleeding out) subsequent to shooting.”*

NOTE: The consensus in the various protocol descriptions on the recommended distance described in the various protocols, is 2-8”, with some allowance for .22 rifles.

In applying these requirements to these horse slaughter facilities, the following concerns arise:

#### ***The weapon should be fired with the muzzle close to the head (but not against the skull).***

Other than the smallest ponies, the shooter at Richelieu was seldom closer than 3 feet (approximately) from the target and at times appeared to be some 4 to 8 plus feet away (as when there was a second horse in stun box; a horse was facing the opposite direction, or when attempting to shoot a horse obstructed by another in the same chute. He would typically shoot horses facing the opposite direction at an angle from between the sidebars at the back of the box.

At Bouvry, the distance appeared more consistent, however, at times when the horse backed up in the box, or for the donkeys, the distance would be more in the range of a few feet.

#### ***...at the correct location and in the required direction to ensure that the shot penetrates the brain and does significant damage.***

The target for the projectile is an area approximately the diameter of a walnut located just above the intersection of two imaginary lines, drawn diagonally from the top of each eye to the base of each of the opposing ears. This effective stun spot must be hit at the correct angle, perpendicular to the skull and in line with the spine, ideally at a range of

approximately 2-8 inches.

There were several limitations encountered in getting the proper angle and distance for effective euthanasia using a .22 calibre rifle resulting in numerous mis-shots. Of those horses incorrectly hit, many required a second bullet (2 horses at Richelieu: #62, #66 and 9 horses at Bouvry: #45, 81, 91, 102, 133, 148, 175, 176, 179). As well, one horse at Richelieu (#56), and 3 horses at Bouvry (#31, 33, 130) required a third shot be delivered, as they were still obviously conscious after the first two incorrectly placed bullets. It could be argued that more horses at Richelieu should have received a second shot. It is undeniable that these horses suffered greatly in these instances, as full insensibility took up to 4 minutes.

***It is essential that the horse be properly restrained.***

The stun boxes do not provide what would be considered proper restraint, especially for the smaller horse breeds and donkeys which could move about more and even turn around (Richelieu). In fact, the chute at Richelieu was so large that the shooter would often permit more than one horse to occupy it.

***.22 calibre long rifle may render the horse unconscious but may not be lethal and may require exsanguination (bleeding out) subsequent to shooting.***

It should be noted that horses at Richelieu were seldom exsanguinated immediately. The majority were done 1.5 to 2 minutes post-stun; 7 were left for 3 to 5 minutes, horse #91 was left for 6 minutes, before finally being suspended and subsequently bled out. The fact that a .22 calibre rifle does not typically deliver a kill shot, along with the high rate of mis-shots delivered by the shooter, this excessive time lag between stunning and bleed offers numerous horses the opportunity to regain consciousness while they are being processed.

At Bouvry, the voluntary movements made by several horses once suspended and/or while having their throats slashed, meant that unconsciousness was not rendered sufficiently in those horses. It should also be noted that these horses were not afforded a second bullet, and were left to endure the pain of the throat slash likely with the expectation that insensibility would shortly follow. At Richelieu, the shooter did not show concern whether the horses were rendered fully unconscious or not, unless they failed to go down. Twice he shot at a horse and walked away without even looking into the stun box.

The significant number of mis-shots is a great concern. The cause of mis-shots are multi-factorial, and involve a) the wary and flighty nature of the equine; b) inadequacies in facility design; and c) shooter incompetence.

- **VARIATION IN HORSE SIZE**

The shooter often had to aim the barrel up or down depending on the height of the horse's head in relation to his. As a result, even if properly placed, these shots would not enter perpendicular to the skull as is required.

- **MOTION**  
Horse's head and body movements provide a moving target. Both operations had several mis-shots as a result.  
  
Several horses shot at Bouvry would bleed profusely from their nose or mouth, and this would not typically occur if the bullet entered the target area. As the impact of the bullet could easily be seen on many of the horses, it appears dozens of horses suffered inaccurately placed shots to the head.  
  
The shooter at Richelieu would consistently fire at horses who had their heads turned away from him, hitting them in the side of the face or in the eye.
- **FIRING DISTANCE**  
Other than the smallest ponies, the shooter at Richelieu was seldom closer than 3 feet (approximately) from the target and often some 4-8 plus feet away (as when there was a second horse in chute; a horse turned around, or when attempting to shoot a horse when obstructed by another in the same chute). At times, he would shoot a second horse in a chute at an angle through the sidebars.
- **FIRING ANGLE**  
Shooters at both operations had no way of consistently getting the horses to look at them face-on.  
  
At Richelieu, shooter consistently shot from left of center to avoid a vertical centrally-placed metal bar.  
  
Given the height of the horse's head in relation to that of the shooter, the shooter had to aim the barrel of the rifle up on all but the smallest equids.
- **SHOOTER INATTENTION:**  
The shooter at Richelieu seldom took the time to accurately place his shot; rather he would simply raise the rifle and fire at the head of a horse within a span of 2 seconds.  
  
At Richelieu, the shooter was engaged in constant conversation, complete with hand gestures, for several minutes while he processed a number of horses (#27, 28,72,74,79, and 81). At one time during his socializing, he ushered in several horses and then forgot to lower the gate, resulting in the horses backing out. His patience level gradually deteriorated after this and the whippings, electric proddings and the speed he processed the horses, increased.

## CONCLUSION

There is no doubt in my mind, that the horses passing through these slaughterhouses are experiencing fear. According to Temple Grandin, Doctor of Animal Sciences, consultant to the livestock industry in animal behavior, and slaughterhouse design expert, *fear* is a very painful emotion of all animals.

In addition to this psychological pain, these horses also suffered physically in numerous ways. These included slips and falls, fractures, numerous mis-shots with some horses requiring a second or even third bullet; some horses regaining consciousness before or while being suspended by one leg, and/or when their throats were being slashed: excessive traumatization during assembly; excessive whippings of their bodies and across their faces (Richelieu), and excessive use of electric prods (Richelieu).

It is my opinion, the horse processing plants at Bouvry Exports in Fort Macleod Alberta, and Viande Richelieu Inc. in Massueville Québec, currently do not properly address the idiosyncrasies relating to the behavior of this species, nor the dramatic variations in size of equids they process. The horses involved are not consistently rendered insensible, as shooters are seldom able to adhere to proper protocols for euthanasia by firearm. This is due to a combination of horse factors, and human factors.

The numerous acts of willful abuse are also of grave concern in the treatment of these sentient and non-aggressive animals. It also appears that poor facility design poses inherent dangers to not only horses, but to plant personnel as well.

As a result of current slaughterhouse industry practises, horses must endure unacceptable levels of suffering, both emotionally and physically. As this is an issue of cruelty, it deserves immediate attention, along with a moratorium on all similar facilities in the interim.

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