

Sara Shields, Ph.D.

3420 C Street | Lincoln, NE 68510

March 3, 2009

Daniel Hauff
Director of Investigations
Mercy For Animals

Dear Mr. Hauff:

I hold a doctoral degree from the University of California, Davis, in Animal Behavior and have more than ten years of experience as a research scientist, teacher, and consultant in animal welfare, with an emphasis on the well-being of poultry. I have reviewed the video of battery cage egg production sent to me on February 23, 2009, and I have several comments regarding the welfare of the birds I observed.

The video contains footage of hens confined to battery cages. There is ample evidence in the scientific literature that these small, wire enclosures restrict natural hen behavior to such a degree that their behavioral needs are frustrated, which may lead to distress and suffering.^{1,2,3,4,5,6,7} Hens in battery cages cannot engage in the bulk of their normal behavioral patterns, including natural nesting, dustbathing, perching, exploring, and foraging, all of which are important for the well-being of the hen. Cages so severely restrict the movements of hens that they suffer from skeletal weakness and disuse osteoporosis due to lack of exercise.^{8,9,10,11} Battery cages cannot provide hens with an acceptable quality of life, and in my opinion they are inherently cruel.

The video sent to me also shows hens being swung by the head in a twisting motion, in an apparent attempt to kill them. Cervical dislocation is an approved method of poultry euthanasia,^{12,13} but the technique performed in the video is *not* cervical dislocation, and I know of no studies that have verified this method as an acceptable euthanasia technique. Further, to ensure death, the necks of birds should be cut following cervical dislocation,¹⁴ and this action was not performed by personnel in the video.

It is important to note that there is clear evidence in the scientific literature that birds are fully capable of feeling pain and of suffering. Avian species have a highly developed nervous system with complex nociceptive (pain perception) capacity.¹⁵ It is possible that the birds struggling in the video following the neck twisting procedure were still alive and conscious, and would likely be in severe pain, while struggling and wing flapping before being kicked into the manure pit as seen in the video.

Several of the hens in the video appear to be suffering from infections, injuries and possible signs of disease. While individual veterinary diagnosis and care would greatly improve the well-being of the individuals suffering from the medical conditions depicted in the video, on large commercial egg farms, most practitioners abide by flock health principles and it is rare that single birds receive adequate veterinary attention.

It is not uncommon for hens to become trapped in cages, especially if the cages are older designs or in disrepair. The cages in this video are clearly in a dilapidated state, and the fact that entire cage floor bottoms are missing in some shots is very disturbing, as the safety of the hens is severely jeopardized. As seen in the video, trapped birds who cannot extricate themselves often suffer from severe trauma, and in some cases these birds are unable to reach feed or water, resulting in a slow and painful death.

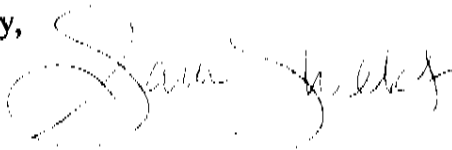
Scientists have noted that the trapping of body parts in this way is almost always due to cage housing.¹⁶

The video also shows several piles of dead birds with some hens still clearly showing obvious signs of life. Even if proper techniques are used to kill birds on the farm, it is imperative that personnel ensure that hens are indeed dead.¹⁷ The egg industry's own guidelines state that, "Birds must be confirmed to be dead prior to disposal."¹⁸ Leaving them to suffer a prolonged death due to injury, illness or suffocation at the bottom of a pile of dead birds is wholly unacceptable.

In commercial egg production operations, cages are typically lined in rows and stacked several tiers high. It is common for tens of thousands of hens to be confined together under one roof. In my own personal experience inspecting hens in cages, it is difficult to see into the backs of cages that are not at eye level, those on the top or bottom tiers. Therefore it is not surprising to me that some of the bodies of dead hens in the video show signs of severe decomposition.

Commercial egg production techniques using battery cage confinement facilities have serious, inherent problems, and this farm is no exception. Indeed, the manner in which hens are killed and discarded, and the state of disrepair of some of the cages, is very troubling. There appears to be a lack of emphasis on respectful, compassionate treatment of the hens at this egg production operation, a problem that seems widespread in the industry. In my opinion, the cruelty involved is immense, obvious, and in need of immediate redress.

Sincerely,



Sara Shields, Ph.D.

¹ Appleby MC, Hughes BO, and Elson HA. 1992. Poultry Production Systems: Behaviour, Management, and Welfare (Wallingford, U.K.: CAB International, p. 186).

² Sherwin CM and Nicol CJ. 1992. Behaviour and production of laying hens in three prototypes of cages incorporating nests. *Applied Animal Behaviour Science* 35(1):41-54.

³ Hughes BO. 1983. Space requirements in poultry. In: Baxter SH, Baxter MR, and MacCormack JAD (eds.), *Farm Animal Housing and Welfare* (Boston, MA: Martinus Nijhoff Publishers).

⁴ Duncan IJH. 1970. Frustration in the fowl. In: Freeman BM and Gordon RF (eds.), *Aspects of Poultry Behaviour* (Edinburgh, Scotland: British Poultry Science Ltd.).

⁵ Baxter M. 1994. The welfare problems of laying hens in battery cages. *The Veterinary Record* 134(24):614-9.

⁶ Wood-Gush DGM. 1972. Strain differences in response to sub-optimal stimuli in the fowl. *Animal Behaviour* 20(1):72-6.

⁷ Yue S and Duncan IJH. 2003. Frustrated nesting behaviour: relation to extra-cuticular shell calcium and bone strength in White Leghorn hens. *British Poultry Science* 44(2):175-81.

⁸ Hughes BO. 1983. Space requirements in poultry. In: Baxter SH, Baxter MR, and MacCormack JAD (eds.), *Farm Animal Housing and Welfare* (Boston, MA: Martinus Nijhoff Publishers).

⁹ Rowland LO and Harms RH. 1970. The effect of wire pens, floor pens and cages on bone characteristics of laying hens. *Poultry Science* 49(5):1223-5.

¹⁰ Wabeck CJ and Littlefield LH. 1972. Bone strength of broilers reared in floor pens and in cages having different bottoms. *Poultry Science* 51(3):897-9.

¹¹ Meyer WA and Sunde ML. 1974. Bone breakage as affected by type housing or an exercise machine for layers. *Poultry Science* 53(3):878-85.

¹² Beaver B, Reed W, Leary S et al., 2000. Report of the AVMA panel on euthanasia. *Journal of the American Veterinary Medical Association* 218(5):669-96.

¹³ The Center for Animal Welfare. Undated. Euthanasia of Poultry: Considerations for Producers, Transporters, and Veterinarians. University of California, Davis.

¹⁴ The Center for Animal Welfare. Undated. Euthanasia of Poultry: Considerations for Producers, Transporters, and Veterinarians. University of California, Davis.

¹⁵ Gentle M and Wilson S. 2004. Pain and the laying hen. In: Perry GC (ed.), *Welfare of the Laying Hen* (Wallingford, U.K.:CAB International).

¹⁶ Appleby MC and Hughes BO. 1991. Welfare of laying hens in cages and alternative systems: environmental, physical and behavioural aspects. *World's Poultry Science Journal* 47:109-28.

¹⁷ The Center for Animal Welfare. Undated. Euthanasia of Poultry: Considerations for Producers, Transporters, and Veterinarians. University of California, Davis.

¹⁸ United Egg Producers. 2008. *United Egg Producers Animal Husbandry Guidelines for U.S. Egg Laying Flocks, 2008 Edition* (Alpharetta, GA: United Egg Producers). www.uepcertified.com/docs/UEP-Animal-Welfare-Guidelines-2007-2008.pdf. Accessed March 3, 2009.