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March 8, 2006

Miyun Park
Vice President, Farm Animal Welfare
The Humane Society of the United States
2100 L St., N.W.
Washington, DC 20037

Dear Ms. Park:

I am an animal welfare scientist at the University of Nebraska, Lincoln, where I teach in the Animal Science department and conduct animal behavior research with laying hens. My current research interests focus on cage size and stocking density, fearfulness as it relates to plumage condition and nutritional factors that influence plumage condition. I have worked with poultry in a research capacity for approximately 10 years.

I have reviewed the video footage of an egg farm that you sent to me on March 6, and I have several comments concerning the well-being of the hens. The footage shows what appears to be a fairly typical egg production facility, where hens are kept in rows of 'battery' cages. The video features several hens that have become trapped at the bottom of their cages and some of them have obvious injuries. In my experience, trapping is not an unusual occurrence in battery caging systems.

Most of the hens in the video are largely unresponsive, but they are all alive. Hen one, although nearly dead, is still breathing. Avian species generally do not show signs of ill health until they are badly injured or very sick. Because most of the profiled hens are unresponsive, I would surmise that their injuries are severe enough that they would not recover if placed back in their cages.

Illness and injury are inevitable consequences of battery cage systems for egg production. The hens in the video appear to be typical laying hens, which produce about 250 eggs per year. This rate of lay, achieved through selective breeding, is tied to a number of potentially painful¹ production related disorders, such as prolapse, egg binding and osteoporosis.² When kept in battery cages, hens with illness or injury cannot protect themselves by moving away from dominant hens, and may become the target of these more aggressive individuals.

Trapped hens have difficulty moving out from under other hens that step on them, as they vie for space in a crowded cage. The untrimmed claws of cage mates could exacerbate the injuries of trapped hens, especially if the plumage on the back is already compromised. The high stocking density will intensify this problem.

Battery cage systems allocate very little space to each hen. But the hens in this video are even more crowded than what has become the industry norm. A 20" by 17.5" cage is a total of 350 square inches. Assuming the measurements in the video are correct and that there are seven birds per cage, each hen has just 50 square inches. The trade group for the egg industry is the United Egg Producers (UEP), and they currently recommend at least 61 square inches for a White Leghorn hen.³ Hens housed at 50 square inches or less will have difficulty maneuvering in the cage, and will stand on top of each other as they compete for space⁴.

Hens under natural or "free range" conditions would display a complex behavioral repertoire and have a sophisticated social structure. In the barren, restrictive environment of the battery cage system, hens are unable to perform the bulk of the normal behavior patterns, and may suffer psychologically, because of it. For example, hens would normally go through a series of nest searching, selecting and preparing behaviors that are almost completely thwarted in the confines of a battery cage. The frustration of this behavior often leads to stereotypic pacing behavior prior to egg laying, evidence that the hen has a behavioral need to lay her egg in a suitable nesting area.^{5,6} Other behaviors that cannot be expressed in a normal way when cages are crowded include scratching, preening, wing flapping and stretching⁷. Normal social interactions, dustbathing in dirt, perching and flying over short distances are also impossible in the battery cage environment. All of these behaviors are displayed by hens in extensive, outdoor environments and are probably very important to the hen.

Hens display considerable cognitive abilities^{8,9,10} and the available research suggests that they may suffer, psychologically, in intensive confinement production systems¹¹ such as the battery cages pictured in the video.

There are many different areas of scientific evidence suggesting that hens kept in battery cages have a very poor quality of life. Given that tens of thousands of hens are raised in each poultry house, that it is impossible to thoroughly inspect and care for each bird, and that trapping, illness and injury are inevitable, in my opinion, keeping hens in battery cages is simply inhumane.

Sincerely,

Sara Shields, Ph.D.

References

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