Should the U.S. Ban Battery Cages For Egg-Laying Chickens?

by Debbie Gray

Imagine being locked in a cage so small that you cannot even spread your arms. You are forced to stand on a floor made only of wire. Your eyes will never see sunshine; your feet will never touch the earth's soft dirt. You have nowhere to go, nowhere to hide. You are trapped your entire life. This is the reality for nearly 270 million of the 285 million chickens in the United States that are used to provide table eggs for human consumption. An estimated 95% of all eggs in the United States are produced in battery cages (Cowan and Greene). This cruel practice of caging egg-laying hens takes away a hen's natural behaviors, causes disease and injury, and is completely avoidable. On January 1, 2012, battery cages were banned across Europe (Park). Should the United States follow in Europe's footsteps and ban battery cages to reduce the inhumane suffering of laying hens as well?

In the United States, "a four pound hen with a wing span of 30-32 inches may be legally confined with four to eight other hens in a [battery] cage that is 14-16 inches high and 18-20 inches across. Each hen has an average living space of 48 square inches" (Davis 54). This small space does not allow room enough for a hen to spread her wings or move in a natural way. These cages are stacked side by side and can be stacked five levels high. Tens of thousands of hens can be housed in a single building. There is no access to natural sunlight or fresh air for the entirety of the hens' lives.



Battery cages prevent chickens from performing important natural behaviors such as nesting. When a hen prepares to lay an egg, she will spend time searching for a quiet and secluded nesting spot. She will perform a ritual of carefully rearranging pieces of straw or hay around her. In a battery cage, there is no privacy and no hay to make a nest. The hen is forced to lay her egg on the bottom of a cold wire cage, which is slanted to allow the egg to immediately roll away from the protection of the hen and onto a conveyor belt outside of the cage. According to Nobel Prize winner and author Dr. Konrad Lorenz, "The worst torture to which a battery hen is exposed is the inability to retire somewhere for the laying act. For the person who knows something about animals it is truly heart-rending to watch how a chicken tries again and again to crawl beneath her fellow-cage mates to search there in vain for cover" (264).

Other natural behaviors that chickens subjected to battery cages are deprived of are dustbathing, scratching and foraging, and perching. Chickens dust bathe to clean and refresh themselves, distributing loose earth and oil from the preen gland at the base of their tail through their feathers to remove built-up oil, dead skin and skin irritants, and to maintain and improve feather structure (Davis 71). The wire floor of the cage also prevents the chickens from naturally scratching at the earth to search for food and insects and to explore. In the evenings, chickens will naturally roost high in the trees or in perches in the barn or hen house, which is also important for bone strength—another natural behavior the battery caged hen will not be allowed to perform.

The extreme conditions in battery cages that layer hens are forced to endure also lead to extreme stress, injury, and disease. One example is feather pecking. Feather pecking is associated



with psychological fear in laying hens (Kim et al. 65). Hens may peck the feathers off of their fellow cage mates resulting in pain, bleeding, and sometimes even cannibalism. To reduce the rate of feather pecking and cannibalism, newborn layer hens are debeaked. Workers remove up to two thirds of the chick's beak with a hot machine blade causing chronic pain and distress (Davis 67).

Foot injuries are also common in caged hens. Toe pad hyperkeratosis, a thickening of the skin on the feet of hens, is thought to be caused by pressure on the claw fold due to the sloping wire of the cage (Abrahamsson, Tauson, and Appleby 521). The hen's claws, "which are designed to scratch vigorously, and thereby stay short and blunt, become long, thin, twisted, and broken. They can curl around the wire floor and entrap her, causing her to starve to death inches from her food and water" (Davis 57).

Cage layer osteoporosis, also known as cage layer fatigue, is another serious problem of hens housed in battery cages due to the lack of exercise available to the hens. It is related to osteoporosis in that it is a consequence of skeletal depletion due to high, sustained egg output; bone is the metabolic reservoir for calcium used in egg shell formation (Webster 184). The hens' bones become so weak they may be unable to stand and may become paralyzed. It is common for these hens to have broken bones. The morality rate for layer hens in battery cages may be as high as 35% due to cage layer fatigue (Webster 189).

Layer hens do not have to be confined to the torture of battery cages. Farmers prefer battery cages for the efficiency of egg collection, easier clean-up, and lower production costs. However, there are alternative housing methods that include barn and free-range which allow the chickens to move freely. In barn systems, the hens are housed in large single or multi-level



structures which resemble warehouses. This is a disadvantage to the farmers because the eggs may be damaged by the hens and workers must manually collect eggs. Free-range commercial systems are similar to the barn system, but may have attached "yards" where the chickens are able to go into an enclosed yard outside. In both of these systems chickens have the freedom to move, flap their wings, perch, dustbathe, and enjoy other natural behaviors that battery-caged chickens do not. The best welfare for hens used for egg production is attained when they are raised in small groups with freedom of movement in complex environments with safe outdoor access (Appleby and Hughes 109).

For the millions of chickens who suffer in battery cages for their entire egg-producing life, there is hope. Hope for freedom and hope for improved conditions. Some states, including California, Ohio and Michigan, have banned the use or new construction of battery cages (Severson A1). In 2008, California voters approved Proposition 2, the "Prevention of Farm Animal Cruelty Act," banning the use of inordinately small battery cages, effective January 2015. California hen enclosures are now required to provide enough space for hens to stand up, lie down, turn around freely, and fully extend their limbs (Wantick 45). While this is an improvement toward the size of the cages that layer hens are subjected to, what about enabling a chicken's natural behavior?

The compromise between keeping chickens caged and allowing chickens to enact some of their important natural behaviors comes in the form of furnished cages. Furnished cages have been the alternative for commercial egg-laying chickens in Europe ever since the ban on battery cages took effect in January 2012. "The cages are equipped with perches, dustbaths, and nesting areas allowing the [chickens] to meet the needs for their natural behaviors, such as nesting,



roosting, and scratching" (Cheng and Pohle 1559). The nesting areas are even covered by a nontransparent plastic or curtain to allow the hen the privacy that she much desires. By allowing laying hens access to these pleasures which are non-existant in conventional battery cages, their stress levels will decrease which can allow for a healthier chicken and higher egg production. A study done at the Perdue Poultry Research Farm also concludes that hens kept in furnished cages compared to conventional cages are less stressed and have higher egg production (Onbasilar et al 559.).

Furnished cages are a feasible alternative to battery cages in the United States. This is not something that can happen overnight, but it is something that could be accomplished over phases. Canada has already promised to phase out battery cages over the next twenty years (Park 122). State legislation has already improved the lives of chickens in states such as California, as mentioned earlier, with the passing of Proposition 2. Most egg farmers would fear the costs associated with converting from conventional battery cages to either furnished cages or cage-free access for their chickens. One solution could be financial incentives or tax cuts to farmers willing to make the switch. Perhaps grant money or low cost federal loans could be offered to offset the cost of switching to more humane housing systems? It could payoff in the long run for farmers to switch when considering higher egg production and healthier chickens.

Consumer prices may increase as well. But wouldn't it be worth it from an ethical viewpoint knowing that millions of chickens throughout the United States could be leading more comfortable lives? However, the price increase may not be as bad as one may think. It is estimated that egg production from chickens in furnished cages would only increase by about one cent per egg (Mench et al. 229). If a family of four purchases one dozen eggs per week, that



5

would only cost an additional \$6.24 per year!

Major corporations are already taking the stand against battery cages and purchasing only cage-free eggs. This includes hotel chains such as Omni and cafeterias at companies like Google. Many fast food restaurants such as McDonald's and Burger King are also jumping on the cage-free wagon (Severson A1). If this can turn into a tidal wave effect, it can put pressure on farmers to start weaning away from battery cages.

For reasons mainly relating to the welfare of chickens, the U.S. should proceed with a gradual ban on battery cages. No one, human or animal, should be forced to spend the majority of their life in cruel confinement and stripped of their natural behaviors and instincts. Consumers can help by reading the labels on the egg cartons that they purchase in the grocery store: choose egg cartons that read "cage-free" or "pasture-raised." The public can also support any legislation that may arise that will ban battery cages. After all, chickens are deserving of humane treatment, as are all animals.



Works Cited

- Abrahamsson P, R. Tauson, and M. C. Appleby. "Behavior, Health and Integument of Four Hybrids of Laying Hens in Modified and Conventional Cages." *British Poultry Science*, vol. 37, no. 3, 1996, pp. 521-40.
- Appleby, M. C. and B. O. Hughes. "Welfare of Laying Hens in Cages and Alternative Systems: Environmental, Physical and Behavioral Aspects." *World's Poultry Science Journal*, vol. 47, no. 2, 1991, pp. 109-28.
- Cheng, W. and K. Pohle. "Furnished Cage System and Hen Well-being: Comparative Effects of Furnished Cages and Battery Cages on Exhibitions in White Leghorn Chickens." *Poultry Science*, vol. 88, no. 8, 2009, pp. 1559-1564.
- Cowan, T. and J. Greene. "Table Egg Production and Hen Welfare: Agreement and Legislative Proposals. *Congressional Research Service*, https://pdfs.semanticscholar.org/47ce/d140eac346b2b8d59781291411dd60148bfe.pdf
 Accessed 30 April 2017.
- Davis, Karen. Prisoned Chickens, Poisoned Eggs: An Inside Look at the Modern Poultry Industry. Book Publishing Company, 1996.
- Duncan, Ian. "The Pros and Cons of Cages." *World's Poultry Science Journal*, vol. 57, no. 4, 2001, pp. 381-90.
- Kim, N. Y., et al. "Behavioral and Vocal Characteristics of Laying Hens Under Different Housing and Feeding Conditions." *JAPS: Journal of Animal & Plant Sciences*, vol. 27, no. 1, Feb. 2017, pp. 65-74.
- Lorenz, Konrad. "Animals are Sentiment Beings: Konrad Lorenz on Instinct and Modern Factory Farming." *Der Spiegel*, vol. 34, no. 47, 1980, pp. 264.



- Mench, J. A., D. A. Sumner, and J. T. Rosen-Molina. "Sustainability of Egg Production in the United States-The Policy and Market Context." *Poultry Science*, vol. 90, no. 1, 2011, pp. 229-40.
- Onbasilar, E. E., et al. "Production Performance, Use of Nest Box, and External Appearance of Two Strains of Laying Hens Kept in Conventional and Enriched Cages." *Poultry Science*, vol. 94, no. 4, 2015, pp. 559-64.
- Park, Miyun. "The Globalization of Animal Welfare: More Food Does Not Require More Suffering." *Foreign Affairs*, 2012, pp. 122.
- Severson, Kim, "Suddenly the Hunt is on for Cage Free Eggs", *New York Times*, 12 Aug. 2007, pp. A1.
- Wantick, Valerie J. "The Business and Ethics of Laying Hens: California's Groundbreaking Law Goes into Effect on Animal Confinement." *Boston College Environmental Affairs Law Review*, vol. 43, no. 1, 2016, pp. 45-78.
- Webster, A. B. "Welfare Implications of Avian Osteoporosis." *Poultry Science*, vol. 83, no. 2, 2004, pp. 184-92.

