

Laying Hen Production Systems: Welfare and Social Sustainability

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Summary

There is growing concern in many countries about the confinement of laying hens in behaviorally restrictive housing systems like conventional cages, and an increasing number of eggs are being produced in alternative housing systems in some countries. In the U.S. where, unlike in the E.U., conventional cages have not been banned, these changes have been until now entirely market-driven and non-cage eggs still make up a relatively small percentage of the shell egg market (about 5%). However, there is now increasing legislative pressure in this regard, and the citizens of California recently passed a ballot initiative that will effectively ban hen cages in the state as of 2015. In this presentation I will describe a project that has been undertaken in the U.S. to examine the potential outcomes of this shift in production practices not just on hen welfare, but on multiple aspects of sustainability, including egg safety and quality, human health, economics of production, public acceptability, and environmental sustainability. This project involves input from experts and diverse stakeholder groups, and will lead to an integrated framework for predicting impacts.

Keywords: laying hen, welfare, sustainability, public acceptability

The conventional cage production system is still the predominant system worldwide for housing laying hens. However, ethical concern about the degree of restriction of the hens' behavior and movement in conventional cages has led to an increasing movement towards alternative systems. Some of this is driven by consumer purchasing preferences, and some by legislation. The most sweeping legislation in the European Union, which in 1999 announced that conventional cages would be banned in 2012, a decision recently upheld by the European Commission despite pressure to delay the implementation date. In the United States, there are no federal laws that prohibit particular types of housing systems for farm animals, nor indeed that regulate any aspects of animal welfare on-farm. Approximately 95% of egg-laying hens in the U.S. are housed in conventional cages, a percentage that has only decreased slightly (from about 98%) in the last decade. In 2008, however, voters in California passed a ballot initiative that, because of definitional language stating that hens must be able to "stretch both wings without touching another hen or the sides of their enclosure," will effectively ban the use of cages for laying hens in the state as of 2015. It is likely that similar initiatives will be introduced in other states, and that there will be continuing pressure on retailers by animal protection groups to increase the percentage of non-cage eggs that they purchase.

During the lead-up to the EU cage ban, there has been considerable development of alternative housing systems in Europe, as well as a significant amount of research on various aspects of hen welfare, especially behavior. However, animal welfare is not the only factor that affects the public acceptability of animal production systems. Other factors include food safety, product nutritional quality, human health, environmental impact, and other social values such as local quality of life – all elements of agricultural sustainability. Different hen production systems have the potential to affect these different aspects of sustainability in different ways. However, research on these other aspects has lagged behind research on hen welfare until only recently. In 2006, the EU funded the

SAFEHOUSE and RESCAPE projects to examine housing factors affecting the potential for microbial contamination of eggs and to develop new methods to reduce egg contamination. The EU Welfare Quality Assurance Project, although not focusing specifically on laying hens, created a research framework for social scientists to assess the attitudes of EU consumers towards animal welfare and towards purchasing “welfare friendly” products. Although these are helpful developments, there are still significant information gaps in our knowledge of the sustainability of different hen production systems, and challenges in understanding how to integrate diverse information into a framework or model for assessing those impacts.

In an attempt to take a structured, holistic approach to addressing the problem of sustainability of hen housing systems in the U.S., the American Egg Board, AEB (the AEB is a “checkoff” organization, which means that it is funded via a legislatively mandated contribution from egg producers, with the producers contributing an amount for each carton of eggs sold which is then used for egg marketing and research) has funded a project to examine the likely impacts of egg production shifting from conventional cages to alternative housing systems. The initial phase of this project involves the development of white papers on the following topics: values and public acceptability dimensions; economic issues; hen welfare; food safety, quality, and security; human health; and environmental sustainability. These white papers will outline what is known about each of these topics and identify information gaps. Overarching research priorities will also be formulated. The teams writing the white papers are comprised of biological scientists, social scientists, and ethicists from the U.S. and other countries. The second phase of the project involves gathering broad-based stakeholder input. Stakeholders representing consumer groups, animal welfare groups, environmental groups, human health organizations, groups concerned with sustainability and rural community development, retailers, egg producers, and others will review the white papers, provide input into prioritizing research priorities, and work through scenarios that will lead to the development of an integrated framework paper. The final phase of the project will involve identifying funding sources and assembling multi-institutional, multi-disciplinary teams to address critical research areas. This project, and the major findings of the white papers, will be discussed in more detail during my presentation.