

# Refurbishing Roosts

Alberta's egg producers care about their hens' welfare, so they're renovating their roosts to include more comfort for the hens.



Dr. John Church's research is demonstrating that small changes to hens' cages can provide big benefits in terms of hens' happiness.

Alberta's egg producers want their hens to be as happy as possible. Producers in the province have taken steps to ensure that the eggs delivered to consumers' tables are safe and produced in a healthy hen environment. Producers have taken the initiative and sought out research to find the perfect new furniture for their hens' roosts.

Housing laying hens in cages, as most hens in Alberta are, offers both benefits and challenges in regards to production and also to hen welfare. Air quality for both hens and humans who work within the barns is improved in cage systems, as feces are allowed to drop out of the cage and into a manure handling system. This also improves the safety of the eggs for human consumption as the danger of *Salmonella* is decreased in this cleaner system. And housing hens in smaller groups, similar to natural groupings, decreases communicable disease and injuries due to pecking between hens.

At the same time, current cage design, which lacks certain structures, may result

in frustrated hens because they cannot exhibit the natural behaviours of nesting and perching. Two alternative systems have been evaluated: housing the birds loose and providing a furnished cage that has nesting areas and perches to keep the hens happy. Alberta's producers wanted to know what would work best for their birds, and so, in 2002 the Alberta Egg Producers decided to anticipate changes in the industry by determining the preferable system and how to best implement the changes.

Dr. John Church, Leader, Livestock Welfare Unit with the Alberta provincial government, and University of Alberta graduate student Michelle Jendral have been working steadily on finding those answers. Their work is discovering some surprising findings that benefit both the hens and producers.

Church and Jendral are comparing a European furnished, colony cage with a modified conventional cage and have discovered that Alberta's producers can achieve the same increase in hen welfare (as brand new furnished cages)

without replacing their existing systems. "A modified conventional cage, with an added nest box and perch offers all the benefit of the European model with none of the detriments (such as cannibalism and contaminated eggs), and at the cost of perhaps five cents per dozen eggs to the consumer," says Church. "This means that the hens can be made happy at a minimal cost to all involved. It's a win-win situation."

Church's findings, along with the work of others, is evaluating the feasibility of the free-run alternative and exploring the optimal way to improve bird welfare. In a world where some feel free is better, the free-run system fails. "In the wild, birds would congregate in small groups. A free-run system, such as what is being pushed for in Europe, actually perpetuates more cannibalistic behaviour, pecking, and disease transmission because the stocking densities are at unnatural levels," Church explains. "The future of laying hen production is definitely in a cage system, but in a modified, furnished cage."

Church's research has found another unexpected benefit: although the added structures mean removing a bird per cage, thus decreasing overall flock numbers, production remains constant. The remaining birds will produce just as many eggs as the original flock simply by the addition of the comforts of perch and nest box. "These birds are so happy, they're actually compensating for their missing roommates by laying just as many eggs overall," explains Church.

Church's research can attest that a modified cage system, complete with nesting box and perch, keeps the hens happy with minimal changes to their roosts. But the benefits are anything but minimal – increased food safety, flock health, and hen welfare means chickens and eggs both come first.

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