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The Five Freedoms for Good Animal Welfare

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As the divide between consumers and agriculture continues to widen, the need for more scientifically based information increases. One area of concern to many is the confinement of large numbers of birds in barns or houses. These operations are frequently characterized as "bad for the animals" simply because they have large numbers of birds. Big does not equal bad nor does small equal good. Either system can be either bad or good depending upon the management. And, the major poultry producers in the United States have systems in place to assure proper care of the birds.

Poultry Welfare

In 1964, Ruth Harrison's book, *Animal Machines: The New Factory Farming Industry*, was published in England. The book described intensive livestock and poultry farming practices as they existed at the time in Great Britain. The next year, the British government responded by establishing a committee to look into the welfare of farm animals. Professor Roger Brambell was asked to chair the committee which presented the "Report of the Technical Committee to Enquire into the Welfare of Animals Kept Under Intensive Livestock Husbandry Systems." This report became known as "The Brambell Report."

The conclusion of the report was that animals should have the freedom "to stand up, lie down, turn around, groom themselves and stretch their limbs." This became the "Five Freedoms" for farm animal welfare. Today, these freedoms have been somewhat expanded and adopted by a wide variety of organizations including the World Health Organization. Even without formal adoption, various groups use these criteria as a basis for establishing detailed animal welfare policies and audit criteria.

The Five Freedoms and the Modern Broiler Industry

1. **Freedom from thirst, hunger and malnutrition** – by ready access to fresh water and a diet to maintain full health and vigor.

Modern housing is designed to provide enough water and food for every bird. In the United States, these buildings are equipped so that chickens do not have to go more than 15-25 feet to obtain either feed or water. In addition, there is feed available for the birds all day every day so they can eat as often as they choose. In addition, companies employ nutritionists with specialized education to design the diets the birds are fed. Each diet is specific for the age and type of birds being housed.

And, the caretakers are able to walk through the houses and easily observe the birds to confirm that they have ready access to feed and water. This includes inspecting the height adjustments of the equipment for ease of access at the various ages of the birds as well as confirming that all of the systems are functioning properly. Most companies require that this inspection be done at least twice a day.

2. **Freedom from discomfort** – by providing a suitable environment including shelter and a comfortable resting area.

One of the reasons that modern housing has developed is so that the birds can be provided a controlled atmosphere to protect them from extremes in environment as well as provide shelter and comfortable resting areas. In the United States, meat-type

chickens are never in cages but rather are allowed to roam free in large barns. These barns have dirt floors that are covered with a soft bedding material. This bedding material provides a soft resting area for the birds. In addition, the dirt floors and bedding material help keep the house dry by allowing drainage of any spilled water.

Houses are designed to provide ventilation so that birds have good quality air. Houses with curtains are no longer the standard for providing the best possible environment for the birds. The newest barns are equipped with systems that provide "tunnel ventilation." Properly ventilated housing is essential for maximum performance and bird comfort. These systems are designed to remove heat and excess moisture while minimizing dust, odors and the buildup of potentially harmful gases such as ammonia and carbon dioxide.

In addition, the barns are sized so that there is room for all birds to rest and perform normal activities. The size of the barn determines the number of birds that can be placed in it to achieve the best conditions. If the average size of the birds desired at market increases, the number of birds that can be placed in the barn decreases. It is important that at least the minimum amount of space per bird is maintained so that every bird can sit at the same time, have access to food and water and be able to move around freely.

3. **Freedom from pain, injury and disease** – broiler birds are vaccinated at appropriate ages to protect them from a variety of common diseases. In addition, the conditions in the barns are maintained so as to minimize exposure to other potential disease organisms. Modern farms have strict biosecurity policies that limit access to the birds from pests such as rodents, wild birds, household pets and humans. Visitors are required to wear special outer clothing provided to prevent their exposing the animals to disease organisms. In addition, visitors are required to stay away from other poultry for 48-72 hours before being allowed on modern poultry farms. This includes necessary visitors such as delivery personnel, utility repairmen and even veterinarians.

   In addition, the design of the barn facilitates easy observation of the birds so that they can be inspected for injury or signs of disease. The farmer is able to walk through the entire house by making three or four paths through the length and see virtually every bird. Most farmers do this at least once each day, and many visit their birds two or more times a day. In the event that an injured bird is observed, it can be easily selected for appropriate treatment.

   Specialized feeding and watering equipment is used so that the potential for contamination from the birds or air is minimized. This equipment also can be used to distribute treatments when necessary by adding them to the feed or water.

4. **Freedom to express normal behavior by providing sufficient space, proper activities and company of animals of like kind** – chickens are flock animals which means they like to be in close proximity to other birds. They will "huddle" together even when there is plenty of room to spread out. This is a normal behavior. In addition, the house size and stocking density provide room for normal behavior appropriate to the breed and bird age. "Dust bathing" is another natural behavior of chickens. The loose bedding material not only provides a soft surface for the birds, it can be used for dust bathing.

5. **Freedom from fear and distress by ensuring conditions that avoid mental suffering** – the most common and easiest measure of fear in chickens is by their responses such as attempts to escape, defensive behavior, freezing in place or immobility and vocalization. Other measures require taking of blood so that specific chemicals can be measured or measuring heart rate. Fear reactions by chickens are commonly seen in the presence of predators such as hawks or fox. Loud, sudden noises also seem to startle them and may be a temporary source of fear as they often "freeze" in reaction to these noises.

   Humans are also a source of fear in chickens. For this reason, walking through the house to inspect the birds, beginning on the first day, has the effect of acclimating them to humans and thus reducing fear. The walking should be done at a steady pace and at approximately the same speed throughout their lives as dramatic changes in human behavior can produce fear.

The modern system did not just happen but rather is the result of 50+ years of advances in knowledge and technology which allowed the production of large numbers of animals on relatively small amounts of land that has little use in other forms of agriculture. The final result is the production of an abundant, affordable and safe food supply. In 1950 a single farmer could produce enough food for about 30 people, and today, with all of the improvements, that farmer can produce enough for 150 people.

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