

Industrial Farm Animal Production

Our topics for this week are:

- Proposed advantages of close confinement food animal production
- Disadvantages of close confinement food animal production

In stark contrast to what is otherwise considered minimum space and environmental enrichments essential for other domesticated animals, chickens in battery cages, bull calves in veal crates, and sows in gestation crates are confined with little movement possible and natural behavior is not permitted for prolonged periods. These confinement situations are associated with a greater incidence of tail-biting and cannibalism in sows, tongue rolling and sucking objects in calves, and feather pecking in poultry. Lameness is more common because the lack of movement impairs normal nutrition of joints, and less variety of weight bearing stresses weakens bone strength. Industrial farm animal production is geared toward only a few selected breeds which weakens the genetic diversity of the species and risks creating one breed that could have unusual susceptibility to diseases. A perfect alternative does not exist, though. Free range confinement requires greater land use, risk of predation, increased parasite transmission, and risk of flystrike.

Industrial farm animal production, also called Concentrated Animal Feeding Operations (*CAFOs*) and factory farming was created to meet economic interests with inadequate regard to the five basic needs (freedoms) of animals. Extreme confinement of food-producing animals began with battery cages for chickens during the Great Depression as a lower-cost means to produce eggs. Gestation crates for sows were introduced in the 1960s as a lower-cost method to meet the growing demand for pork products, in rapidly developing Asian countries. Battery cages and gestation crates are prime examples of industrial confinement that are considered unacceptable to house any other birds or other mammals, respectively, including zoo animals, research animals, working animals, or pets.

Veal crates are small stalls for bull calves that will not be used for breeding. Crates for veal calves are labor- and cost-saving, but not all veal production is as restrictive as crates. Restricting movement of calves results in softer, paler, veal meat. Veal crates are 2.1 to 2.5 ft wide, and calves are tied to the front of the crate. The floor is slatted or slanted to reduce the calf's contact with urine and manure. Calves are kept in isolation until slaughter around 16 weeks of age, without physical contact with other calves and often without visual contact. At least eight states have banned veal crates, and the American Veal Association has encouraged the elimination of veal crates.

Gestation crates are 7 X 2 ft metal enclosures that pregnant sows weighing 300 to 600 lb. are confined in throughout their pregnancies. An average sow will have 2.5 litters per year for 3 to 4 years, spending most of that time in gestation crates. Larger sows do not have room to lay on their sides and must rest on their chests. The floors are slatted to allow urine and feces to fall away in to a pit. Gestation crates are illegal in at least eight states in the U.S., Sweden, and the United Kingdom. More than eight grocery, restaurant, and food service chains in the U.S. have announced plans to eliminate swine operations that use gestation crates from their supply chains.

The need for gestation crates is supposed to prevent fighting among pregnant sows,

although the risk can be controlled by preventing overcrowding, providing an opportunity to root (straw bedding), and avoiding mixing in new sows into an established social group. However, the alternatives of turn out stalls and group housing options risk potential inter-sow aggression and environmental stresses. The American Veterinary Medical Association's current policy on sow housing states that "*sows should be provided with adequate quality and quantity of space that allows sows to assume normal postures and express normal patterns of behavior*".

Cages for laying hens in the U.S. began being used in the 1931 to reduce disease acquired from contact with dirt, increase efficiency of handlers, and reduce the cost of containment through reducing the space for each bird. By 1990, 95% of all egg production in the U.S. involved battery cages. Battery cages provide insufficient space to hunt and peck for food, dust bathe, flap wings, perch, or nest. Advantages of battery cages are protection from predators, avoidance of disease vectors, and shelter from temperature extremes. Decreased aggression is often cited as an advantage of battery cage conditions, but the concurrent debeaking, restricted ability to move, and reduced lighting in battery conditions are the primary reasons that aggression to other birds is decreased. Poultry battery cages were banned in California in 2008 and Europe in 2012. The McDonalds Corporation is the largest egg buyer in the U.S. It will phase in cage-free eggs with a goal of being totally cage-free by 2025.

Between 2005 and 2008, the Pew Commission on Industrial Farm Animal Production examined how animal agriculture affected human health, animal health, the environment, and rural communities. Commissioners represented the fields of veterinary medicine, agriculture, public health, business, government, rural advocacy, and animal welfare. The commission held public meetings across the country and published several technical reports. Among the findings were "animal welfare problems, mainly as a result of the extremely close quarters in which the animals are housed."

In 2008, the Pew Charitable Trusts Commission on Industrial Farm Animal Production and John Hopkins University, Bloomberg School of Public Health recommended phasing out gestation stalls and battery cages within 10 years.

Now, let's recap the key points to remember from today's episode:

- **Close confinement food animal production operations, also called factory farms, have many economic advantages**
- **Close confinement production of food animals has the potential to increase stress and the spread of introduced diseases; decrease genetic diversity along with its immunologic advantages; result in stereotypic behaviors, mutilation, and cannibalism; lead to injuries and lameness; and pollute the environment**

More information on animal handling is available in my book, *Animal Handling and Physical Restraint* published by CRC Press. It is also available on Amazon and from many other fine book supply sources.

Additional information is available at www.betteranimalhandling.com

Don't forget serious injury or death can result from handling and restraining some animals. Safe and effective handling and restraint requires experience and continual practice. Acquisition of the

needed skills should be under the supervision of an experienced animal handler.