

Confinement of Livestock

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FACT SHEET #13

Living WITH Livestock PRODUCTION



Introduction

Modern agriculture has developed large-scale, intensive production systems, including those for livestock. At the same time, society has shown increased interest in how its food is produced and how animals are cared for. This includes the practice of rearing animals in confined spaces.



Background

In the latter part of the twentieth century, animal agriculture underwent a major transition to intensive livestock operations. These operations are more economically viable and provide food at a lower cost to the consumer. Efficient livestock operations now enable each farmer to feed many more people than in the past.

Many livestock operations achieve efficiency by raising large numbers of animals in smaller spaces. While providing for most of the animals' needs, some of these confinement production systems restrict their movement. They may also limit the ability of animals to exhibit some normal behaviours.

The Canadian Agri-Food Research Council developed the *Recommended Codes of Practices for the Care and Handling of Livestock*. The *Codes* are based on technical input from producers, animal scientists, veterinarians, and representatives of the humane movement. These *Codes* are part of the regulations in *The Animal Care Act of Manitoba*. As such, they specify the guidelines for livestock production pertaining to the treatment of animals. The *Act* also outlines the "Duties of the Owner" regarding responsible animal care. Producers who fail to comply with the *Act* may be subject to prosecution in Manitoba.

"Duties of the Owner" under *The Animal Care Act of Manitoba*

1. Provision of adequate water and feed.
2. Provision of adequate medical attention.
3. Protection from heat and cold.
4. Provision of adequate space, ventilation, and sanitation.
5. Opportunity for exercise.

Examples of Confinement Systems

Sow Stalls

Modern pig barns provide for most aspects of pig care. These include feed, water, medical attention and clean, dry housing with temperature, ventilation and humidity controls.

Most pigs are raised in group housing units where they have freedom of movement.



However, pregnant sows are commonly housed in individual gestation stalls. They were developed to eliminate biting, bullying and competition for feed among sows. In stalls, sows have ready access to feed and water, individual medical treatment and protection from other sows. As a result, they may be physically healthier, and may produce more piglets than sows raised in alternate production systems. On the other hand, sows confined to a space where movement is restricted, are unable to exhibit some natural behaviours such as rooting, nesting, and wallowing. Also, the lack of exercise may negatively affect a sow's welfare.

Group housing systems are continually evolving to provide alternatives to individual gestation stalls. This type of housing requires a thorough

understanding of sow behaviour in establishing pen design and feeding systems. Extra staff training and more attention to worker safety is needed.

The farrowing crate is a modified stall system for use when the sow is about to give birth, and until the piglets are weaned. Although it restricts the sow's movement, use of the farrowing crate is short-term and protects the piglets from being crushed by the sow. Alternate designs are continuously being studied.

The Battery Cage for Egg-Laying Chickens

The battery cage system consists of rows of cages for egg-laying chickens. Under this system, hens are grouped in cages so that the eggs can be easily collected. The hens are clean, well nourished, and the eggs produced are also clean, resulting in a safer food product for the consumer. This system makes the operation more efficient because of reduced labour requirements. However, the battery cage system reduces the hen's ability to express natural behaviours such as perching, nesting, and dust bathing.

As a partial solution, space allowances could be increased for chickens in such systems. Alternative housing such as the modified cage with a nest box and



perch, or the open barn system using floor litter, perches, and nest boxes, are available. However, these systems have greater labour requirements.

The Beef Cattle Feedlot

Most cattle raised for beef spend four to eight months prior to slaughter in a confined area called a feedlot. Feedlots are generally a series of outdoor pens constructed with shelter from wind. They are designed to provide adequate space for feeding and watering, appropriate bedding material and proper drainage. Animals in feedlots cannot graze. However, they are able to exercise.



Dairy Cow Housing



Modern dairy operations provide feed, water and medical attention. The barns are clean and dry with temperature, ventilation and humidity controls.

There are two main types of housing for dairy cows during the months when they are producing milk – the free-stall dairy barn and the tie stall system.

In free stall barns, the cows are able to move freely throughout the barn and have access to comfortable stalls to lie down. They may also have access to outdoor pens in the summer but usually not to pasture.

In tie stall barns, milking cows stand in individual stalls and are tied by a neck chain. Movement about the barn is restricted. Producers may use a regular schedule to allow the cows to get exercise outdoors, as the weather permits.

During the period of time when the cows are not producing milk, they are kept in groups either indoors, outside or on pasture depending on the season.

The Veal Calf Stall

The veal calf stall is a confinement system for raising some dairy calves. The calf is raised in a controlled environment where it is fed a highly specialized diet to produce veal. Movement is restricted and the calves are unable to exhibit some normal behaviour.

Alternate group housing systems for veal calves are available, and are being

utilized by some producers. However, hands-on management to reduce disease and to produce high quality veal products is more difficult in the group system.

The Pregnant Mare Urine (PMU) Stall

Horses in the PMU industry are kept on pasture from spring until late fall. During the winter, pregnant mares are kept in tie stalls to allow for the collection of estrogen-rich urine. The mare urinates into a rubber collection system that is attached to the stall.

Collection systems have been improved to allow more movement. Mares are allowed free access to water, have balanced nutrition programs and the opportunity for regular exercise. A veterinarian inspects the mares three times during the collection season to ensure that they are healthy.

Research into alternative systems for urine collection is ongoing. To date, no suitable alternative to the PMU stall has been identified.



What Does the Future Hold?

The *Codes of Practice* are in a state of revision and review. What is an acceptable practice today may well be judged to be unsatisfactory tomorrow. Changes to the Codes will become part of the legal framework of *The Animal Care Act* in Manitoba. Producers must conduct their operations in accordance with the Act.

The trend towards production systems that provide more opportunity for exercise is being pushed along more rapidly by consumer demand. Some consumers have demonstrated a desire to purchase eggs, meat and milk produced in such systems and are willing to pay a premium.

The push by many large food retailers to market animal-welfare friendly foods, has created a significant momentum for change in how animals are raised. Many food retailers have established animal welfare advisory boards that specify production practices.

Jurisdictions such as the United Kingdom (U.K.) and the European Union (E.U.) are moving to ban some livestock confinement systems. The veal calf stall is no longer used in the U.K., the battery cage has been banned in Switzerland, and the gestation stall will be banned shortly in the U.K. and E.U. Livestock producers and government regulators in Manitoba and Canada would prefer to avoid legislative bans, instead using codes of practice and societal pressure to induce change.

Summary

Intensive livestock production systems were developed to enhance productivity and efficiency. These systems have allowed producers to reduce disease, and to produce safe, wholesome meat, milk, and eggs at a lower cost to the producer and consumer.

The public is becoming more interested in how food is produced and is expressing concerns about confinement. There are alternatives to current confinement systems and research into new methods is ongoing.

Further Information

For further information about livestock production refer to other titles in the series: "Living with Livestock Production" available from Manitoba Agriculture, Food and Rural Initiatives offices. More detailed information can be found on the Internet at www.gov.mb.ca/agriculture/livestock

Other titles available include:

- Health Issues and Livestock Production
- Livestock Odours – Sources, Concerns and Solutions
- Surface Water Issues
- Nitrates in Soil and Water
- Land Application of Manure
- Siting Livestock Production Operations
- Understanding Anti-microbial Resistance
- Food Safety on the Farm
- Livestock Operations and Groundwater Quality
- Livestock Pathogens – A Natural Occurrence
- Managing Livestock Mortalities
- Livestock Manure Storage
- Phosphorus in Soil and Water