

# The Alberta Turkey Industry

## *Structure of the Alberta Turkey Industry*

### **Alberta Turkey Producers Board**

The Alberta Turkey Producers Board manages the production of turkey in Alberta. The board operates under the following acts and regulations: Turkey Producers Marketing Plan Regulation ([AR 259/97](#)), Turkey Producers Authorization Regulation ([AR 275/2002](#)), Turkey Marketing Regulation ([AR 1/2004](#)) and Turkey Producers Federal Authorization Order ([AR 209/2002](#)). The Alberta Turkey Producers board was established in 1966.

Executive Director: [Greg R. Smith](#)

4828 - 89 Street,  
Edmonton, Alberta  
T6E 5K1

Tel: (780) 465-5755

Fax: (780) 465-5528

E-mail: [greg@albertaturkey.com](mailto:greg@albertaturkey.com)

Website: [www.albertaturkey.com](http://www.albertaturkey.com)

Under the authority of the regulations, the Alberta Turkey Producers Board licenses producers and processors and sets the price paid to producers by negotiating with the processors. The Board also maintains the quota system and promotes turkey products.

### **Canadian Turkey Marketing Agency**

The Canadian Turkey Marketing Agency (CTMA) was formed in 1974 and is responsible for setting national production quotas. The CTMA has also been responsible for past national marketing campaigns for turkey, most notably the “Turkey Tuesday” and “Turkey for Dinner” campaigns. The national agency also takes a lead role in issues such as the WTO trade negotiations and crisis management planning and execution.

### **Registered Producers**

Quota is required for production greater than 300 birds per calendar year. Currently 50 registered producers raise turkeys, with an average farm producing approximately 300,000 kg (eviscerated) per year<sup>1</sup> Supply varies during the year due to variability in the market and production systems. Outdoor production systems (which are decreasing in popularity due to predator and disease transmission concerns) are only practical during the summer months in Alberta.

**Table 1. Seasonal variation in turkey production in Alberta**

Period	2003/2004	2002/2003
May – Aug	6,342,247 (42%)	6,019,385 (41%)
Sept – Dec	6,316,926 (42%)	5,558,548 (38%)
Jan – April	2,344,171 (16%)	3,062,963 (21%)

Source: Alberta Turkey Producers, 2004 Annual Report

## **Processors**

Turkey processors work with the Alberta Turkey Producers to establish categories and volumes to be produced throughout the year. Virtually all of Alberta's and Saskatchewan's commercial turkey processing has been consolidated in Lilydale's Edmonton processing plant.

## **Consumption**

Per capita consumption of turkey meat in the United States increased 60% between 1982 and 2002<sup>2</sup>. Trends in retail purchases have been changing over the past several years. In 1992, sales of whole frozen turkeys made up 71% of retail purchases. By 2002, frozen turkey sales decreased to 62%. In Canada over the same time period further processed turkey products almost doubled from 7% to 13% of retail sales.<sup>2</sup>

Given that the production infrastructure of turkey is underutilized (75% of Alberta's capacity), along with current emphasis on aggressive marketing of further processed product, there is an excellent opportunity for the rapid expansion of the Canadian turkey industry.

## ***How is turkey produced in Alberta?***

### **Getting Started**

In Alberta, quota must be obtained before a producer is allowed to produce greater than 300 turkeys in a calendar year. Quota can be leased or purchased from current quota holders.

Note: Anyone wishing to produce less than 300 turkeys per calendar year may do so without registering or obtaining quota.

## **Recommended Code of Practice**

The Canadian Agri-Food Research Council has produced a Recommended Code of Practice for the Care and Handling of Farm Animals – Chickens, Turkeys and Breeders from Hatchery to Processing Plant. The code of practice promotes acceptable standards of animal husbandry and handling. It is always a challenge to balance the best interests of the animals with the demands of the poultry industry. Following the code of practice is voluntary.

## Beneficial Management Practices

The Alberta Chicken Producers, Alberta Egg Producers, Alberta Hatching Egg Producers, the Alberta Turkey Producers and Alberta Agriculture, Food and Rural Development have also developed a manual for environmental management for poultry producers. The purpose of the *Guidelines to Beneficial Management Practices: Environmental Manual for Poultry Producers in Alberta* is to document, for producers and society, management options that are environmentally sound, comply with existing regulations and are economically feasible. The practices outlined in the manual are intended to reduce the nuisance effects of livestock production.

## Housing

There are three main classes of turkey production. The classes are based on mature market weights and vary as follows:

**Table 2. Turkey Categories based on Live Weights and Age at Marketing**

Category	Live Weight (kg)	Age at Marketing
Broilers	Under 6.2 kg	10-12 weeks
Hens	6.2 kg to 9.8 kg	13 – 15 weeks
Light Toms	9.8 kg to 13.3 kg	16 – 18 weeks
Heavy Toms	13.3 kg and over	Older than 18 weeks

(sources: Canadian Agri-Food Research Council<sup>3</sup> and Alberta Turkey Marketing Board<sup>4</sup>).

Turkey barns are quite similar to broiler chicken facilities. Turkeys are grown in the following production systems:

- Total confinement,
  - Total confinement barns are generally completely open on the inside, allowing the birds freedom of movement throughout the barn. The advantages of total confinement barns are: control of microclimate and protection from predators and disease carried by wild birds.
- Semi-confinement
  - Semi-confinement barns are generally pole-constructed and completely open on the inside. The bottom portions of the side walls may be removable during the summer months, allowing fresh air in the building. The area around the barn may be fenced allowing the birds access to the outdoors.
- Range.
  - Shelters or natural shade is recommended; if shelters are provided they must be large enough to avoid overcrowding.
  - Turkeys should be protected from other animals. If enclosures are fenced, the fences should be checked regularly. Error! Bookmark not defined.

Male and female turkeys have different mature weights. Males have higher absolute growth rates and will grow larger than female turkeys. However, female turkeys will achieve their mature weights earlier than males and as such the hens and the toms are reared separately.

**Stocking Density:** Stocking densities will vary depending on the size of the birds.. Heavy toms will require more space than turkey broilers. The code of practice recommends that turkeys should always have enough space to stand normally, turn around and stretch their wings without difficulty. Following are the recommended stocking densities for the various weight classes:

**Table 3. Recommended Turkey Stocking Densities**

Category	M <sup>2</sup> /bird	Kg/m <sup>2</sup>
Broilers	0.19 m <sup>2</sup>	32.6 kg/m <sup>2</sup>
Hens	0.19 m <sup>2</sup> to 0.28 m <sup>2</sup>	32.6 kg/m <sup>2</sup> to 35.0 kg/m <sup>2</sup>
Light Toms	0.28 m <sup>2</sup> to 0.37 m <sup>2</sup>	35.0 kg/ m <sup>2</sup> to 35.8 kg/ m <sup>2</sup>
Heavy Toms	0.37 m <sup>2</sup>	35.8 kg/ m <sup>2</sup>

source: Canadian Agri-Food Research Council Error! Bookmark not defined.

**Feed and Watering Systems:** Systems used for rearing turkeys need to be sturdier than those used in chicken production. Feeder and waterer space per bird vary depending on the growth stage of the turkeys and the design of the equipment. Since water consumption can increase quite dramatically during hot weather, supplementary waterers may need to be supplied during the summer months.

**Lighting:** Commercial turkey lighting programs are similar to those used in broiler chicken production. Light intensity for the first 3 days of life should be no less than 50 lux to encourage the poults to begin eating and drinking normally. Error! Bookmark not defined. However, since bright light can trigger feather and toe picking, light intensity should be decreased when the birds are older.

**Management:** Poults are more difficult to start than chicks. Management during the brooding period is the most critical stage of production. Many turkey growers rely on a brooder stove surrounded by a brooder guard as the main source of heat for the young birds. Poults can go to the brooder to warm up and rest, and return to the edges of the brooding area for feed and water.

Attention to detail is vital for success! Corners should be rounded to avoid piling and smothering. Turkeys are also very likely to pick at objects in their environment, such as litter. Too much litter in the gizzard can cause impaction, which can lead to death. Large-sized litter material such as unchopped straw can be especially problematic.

Poults need to eat and drink as soon as possible after they are placed in the barn. Supplemental feed and water stations should be provided. Water should

be provided at or near room temperature; ice cold water will shock the bird's system and can cause death within a matter of minutes.

**Labour Requirements:** Turkey production is more labour intensive than broiler chicken production. The degree of automation in the industry varies considerably.

Broiler Turkeys	One person operation, full time: Feed: Feed Conversion: Placement Cycle: Housing: Market Weight:	15,000 turkeys (3 times per year) 10.8 kg per bird 2.0 16 weeks 0.19 m per bird 5.4 kg
-----------------	---	---

**Turkey Hatching Egg Production:** The production of turkey hatching eggs is a very small part of the poultry industry in Alberta (3 producers). There is a relatively small demand for turkey hatching eggs. The risks associated with turkey breeding flocks are very high and require strict bio-security measures. Turkey breeding stock is very valuable and difficult to manage. All commercial breeder turkeys are artificially inseminated, increasing the labour intensity of this sector.

## ***Current Issues in the Alberta Turkey Industry***

### **Welfare**

Consumers and special interest groups are becoming more concerned about animal welfare issues which could potentially drive changes to the production methods of the Alberta turkey industry. Alberta Farm Animal Care (AFAC) was formed in 1993 by Alberta's major livestock groups, including the Alberta Turkey Producers. AFAC's goal is to improve animal handling and promote responsible animal care in Alberta.

### **Hormone Usage**

Commercial turkeys are not fed hormones. There are currently no hormones approved for feeding to turkeys by the Canadian Food Inspection Agency. Improvements in growth rates and efficiency have been achieved at the pedigree level using traditional methods such as selective breeding of fast-growing, efficient individuals.

### **On-Farm Food Safety Assurance Program (OFFSAP)**

The Alberta Turkey Producers are currently implementing the HACCP-based OFFSAP with the assistance of the Joint Venture Group (JVG). The JVG was

formed in 2001 to assist Alberta chicken, hatching egg and turkey producers to implement their on-farm food safety programs.<sup>5</sup>

The program is designed to help producers ensure that their production methods are up to industry standards. Part of the OFFSAP implementation process is the creation of a record keeping system for that describes the operation's production methods. These records are kept to provide evidence that best management practices were followed.

## **WTO Negotiations/Supply Management**

The Alberta Turkey Producers continue to play a role in encouraging provincial and federal governments in their efforts to support the current orderly marketing system. Supply management is being threatened at the international table and Canada continues to negotiate for the continuation of supply management. The current national supply management system allows Canadian turkey producers to be assured of a relatively stable price for their product, while in turn providing a good quality, reasonably priced product for consumers.

---

<sup>1</sup> Alberta Turkey Producers, 2004 Annual Report

<sup>2</sup> Canadian Turkey Marketing Agency, Canadian Turkey Facts 2003.

<http://www.canadianturkey.ca/download/CTMA2003TurkeyFacts.pdf>

<sup>3</sup> Canadian Agri-Food Research Council, 2003. Recommended Code of Practice for the Care and Handling of Farm Animals- Chickens, Turkeys and Breeders from Hatchery to Processing Plant.

<sup>4</sup> Alberta Turkey Producers, 2004.[http://www.albertaturkey.com/turkey\\_production](http://www.albertaturkey.com/turkey_production)

<sup>5</sup> Alberta Livestock Industry Development Fund, <http://www.alidf.ca/feat-03-11-28b.html>