

# CATTLE

## Current situation

### Dairy cows

There are more than 24 million dairy cows in Europe<sup>23</sup>, usually of the black and white Holstein/Friesian type. From the age of two years, dairy cows produce one calf every year. Milk yield per cow has drastically increased since 1984, having risen from an average 4,940 litres to more than 6,500 litres per year.

The short life of the dairy cow (5 to 6 years) contrasts strongly with that of the beef suckler cow, which keeps its calf until natural weaning (about 6 to 8 months) and may produce ten or more calves in her lifetime (a cow can live 15 to 20 years). A large proportion of dairy cows are bred with dairy bulls to produce replacement heifers for milking. The rest are cross-bred with bulls of beef breeds to produce beef calves for fattening. Surplus bull calves from the pure dairy herds are the source of animals sent for veal production.

In the dairy industry, the introduction of a quota system in 1984, at a time when milk supply outstripped demand by 20%, led to a trade in the buying, selling and leasing of milk quotas. The quota system appears to have contributed to a steady decrease in the number of dairy farms and a corresponding increase in herd size.

Health and welfare problems for the cow can be a consequence of the intensity and duration of the production cycle, alone or in combination with environmental factors such as poor housing and lack of stockmanship. In recent years breed, size, nutrition, production and housing have all changed substantially. Lameness, for example, is a common if not almost universal source of suffering in dairy cows. A UK survey of 53 dairy farms published in 2003 showed that more than 22% of cows were either lame or severely lame<sup>24</sup>. When dairy cows are culled, often after the third calf and lactation period, evidence of past or present foot damage is seen in nearly all animals. Other problems include mastitis, an infection of the mammary gland by various pathogens which can last weeks, months or years, and progressive exhaustion due to the workload imposed by lactation. It is estimated that 30-60% of dairy cows suffer from mastitis

### Beef cattle

Calves raised for beef production may be born to dairy cows and reared artificially, or may come from pure bred beef cows. Male calves to be reared for beef are often routinely castrated. Other mutilations include disbudding (removal of horn buds in calves) or dehorning in the older animal. These are painful processes and should be banned. Tail docking and nose ringing are also practised.

<sup>23</sup>In 2005 there were 24 890 700 dairy cows in total in the EU (27 countries) and the provisional figure for 2007 is 24 176 000 (Eurostat: data available at: <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=fr&pcode=tag00014&plugin=1>)

<sup>24</sup>Whay, H.R., Main, D.C.J., Green, L.E., Webster, A.J.F. (2003). Assessment of the welfare of dairy cattle using animal-based measurements: direct observations and investigation of farm records. *The Veterinary Record* 153, 197-2002.

Welfare problems found among older beef cattle include lameness, poor diet, lack of exercise, limited space in indoor housing systems, overstocking, and abnormal behaviour. Many male calves are not castrated and are reared for beef as bulls. Aggression occurs when bulls are kept in unstable social groups. Genetic selection which uses modern breeding techniques such as embryo transfer can be a source of welfare problems from the application of the technique itself and because the selection objectives do not take into account the welfare of the resulting animals, but only their productivity. The production of calves which are oversized in relation to the mother may result from *in vitro* culture of embryos or from the use of bulls from double muscled breeds such as the Belgian Blue. As a consequence, the cow is frequently unable to give birth naturally. Caesarean section is then necessary, increasing the cow's stress and pain.

### Calves reared for veal

Intensive veal units were developed in the 1950s as a way of using low-price surplus male calves and skimmed milk from the dairy industry. In 2007, about 6 million calves were used to produce 860,000 tonnes of veal per year in the EU-27. About 66% of this total is produced by France, Italy and the Netherlands. France and Italy are the two largest consumers of veal in the EU. Next comes Germany, which together with Britain imports veal from the Netherlands. France and the Netherlands together slaughter about three million calves a year<sup>25</sup>.

Welfare concerns for calves relate to early weaning, insufficient space and inadequate diets. The system of slaughter premiums encouraged the long distance transport of young calves within the EU, although concentration of the veal industry in certain member states means that demand for calves is in any case higher in some countries than in others. The higher price obtainable in some countries gives a profit despite the cost of transportation.

EU legislation adopted in 1997 has moved towards answering some of the welfare concerns raised in connection with veal production, through a ban on veal crates. However, the standards relating to calves' diet are still not good enough, even if they cannot be fed exclusively on milk anymore.

## Legislation

### Council of Europe

The Standing Committee of the *European Convention for the Protection of Animals kept for Farming Purposes* adopted a *Recommendation concerning Cattle* in 1988. The recommendation sets out a number of basic principles on stockmanship, buildings and equipment, general management and breeding. It bans tail docking and suggests that castration should be avoided as much as possible. Special provisions for the various categories of cattle are attached as appendices. An appendix on calves was added to the recommendation in 1993. In 2005 the standing committee started to revise the recommendation. This work is still on-going.

### European Union

There is no specific EU welfare legislation for dairy or beef cattle at present. However, all farm animals are covered by the provisions of *Council Directive 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes*. This provides a basic framework requiring member states to enact legislation obliging owners or keepers to ensure the welfare of animals in their care and to ensure that the animals are not caused any unnecessary pain, suffering or injury.

### Beef cattle

The Commission's Scientific Committee on Animal Health and Animal Welfare in 2001 published a report on the Welfare of Cattle kept for Beef Production. Amongst the recommendations were: neither

<sup>25</sup>/Source : Eurostat ([http://ec.europa.eu/agriculture/agrista/2008/table\\_en/41511.pdf](http://ec.europa.eu/agriculture/agrista/2008/table_en/41511.pdf))

tethering nor fully slatted floors should be used. Minimum floor space should be 3m<sup>2</sup> for animals up to 500 kilograms weight and group housing should be the norm. Castration, tail-docking, de-horning and hot-branding cause severe pain and distress and should not be used.

### Calves Reared for Veal

*Council Directive 97/2/EC amending Directive 91/629/EEC laying down minimum standards for the protection of calves* was introduced in January 1997. This prohibited the housing of calves in individual pens or boxes after the age of eight weeks, except when necessary for veterinary treatment. Up to the age of eight weeks, pens must allow visual contact with other calves and are slightly larger than under the original legislation. Stocking densities for calves kept in groups were modified to increase the space available as calves grow. These provisions came into effect from 1 January 1998 for new or rebuilt units, and had to be complied with by 31 December 2006 by all holdings.

Other provisions of the original directive were improved by *Commission Decision 97/182/EC of 24 February 1997 amending the Annex to Directive 91/629/EEC laying down minimum standards for the protection of calves*. Calves may no longer be tethered, except for one hour at feeding time in the case of group-housed animals. Fibre and a minimum ration of iron are to be provided in the diet of all calves over two weeks old. The animals must be fed twice daily, and must not be muzzled. Calves must receive colostrum within the first six hours of life.

According to Article 6 of the Directive, the Commission had to report to the Council by 1<sup>st</sup> January 2006 on the intensive farming systems and socio economic implications, with legislative proposals. This report should be based on the European Food Safety Authority's opinion on the risks of poor welfare in intensive calf farming systems, published in 2006<sup>26</sup>. This Commission report is still awaited.

### Dairy cows

The Animal Health and Animal Welfare panel of EFSA has adopted five scientific opinions on the welfare of dairy cows. They cover the impact of housing, nutrition and feeding, management and genetic selection on the following topics: (1) behaviour, fear and pain<sup>27</sup>; (2) metabolic and reproductive disorders<sup>28</sup>; (3) udder problem<sup>29</sup>; (4) leg and locomotion<sup>30</sup>; (5) overall welfare<sup>31</sup>.

## Future action

- The EU should enact legislation providing for the welfare of both beef and dairy cattle.
- Such legislation should take into account the welfare implications of modern breeding technologies, including the pressures of genetic selection.
- Better standards relating to the diet, space allowances and the requirement for bedding for veal calves should be introduced

<sup>26</sup>[http://www.efsa.europa.eu/en/scdocs/doc/ahaw\\_op\\_ej366\\_calveswelfare\\_en1,0.pdf](http://www.efsa.europa.eu/en/scdocs/doc/ahaw_op_ej366_calveswelfare_en1,0.pdf)

<sup>27</sup>Scientific opinion on welfare of dairy cows in relation to behaviour, fear and pain based on a risk assessment with special reference to the impact of housing, feeding, management and genetic selection [http://www.efsa.europa.eu/EFSA/efsa\\_locale-1178620753812\\_1211902628688.htm](http://www.efsa.europa.eu/EFSA/efsa_locale-1178620753812_1211902628688.htm)

<sup>28</sup>Scientific opinion on welfare of dairy cows in relation to metabolic and reproductive problems based on a risk assessment with special reference to the impact of housing, feeding, management and genetic selection [http://www.efsa.europa.eu/EFSA/efsa\\_locale-1178620753812\\_1211902629142.htm](http://www.efsa.europa.eu/EFSA/efsa_locale-1178620753812_1211902629142.htm)

<sup>29</sup>Scientific opinion on welfare of dairy cows in relation to udder problems based on a risk assessment with special reference to the impact of housing, feeding, management and genetic selection [http://www.efsa.europa.eu/EFSA/efsa\\_locale-1178620753812\\_1211902629243.htm](http://www.efsa.europa.eu/EFSA/efsa_locale-1178620753812_1211902629243.htm)

<sup>30</sup>Scientific opinion on welfare of dairy cows in relation to leg and locomotion problems based on a risk assessment with special reference to the impact of housing, feeding, management and genetic selection [http://www.efsa.europa.eu/EFSA/efsa\\_locale-1178620753812\\_1211902629358.htm](http://www.efsa.europa.eu/EFSA/efsa_locale-1178620753812_1211902629358.htm)

<sup>31</sup>Scientific Opinion on the overall effects of farming systems on dairy cow welfare and disease [http://www.efsa.europa.eu/EFSA/efsa\\_locale-1178620753812\\_1211902630995.htm](http://www.efsa.europa.eu/EFSA/efsa_locale-1178620753812_1211902630995.htm)