

Livestock and their management

In 2007, there were over 220 million livestock animals, including nearly 2 million dairy cows. The 2050 Calculator contains two options relating to agricultural biomass and land use: livestock management (described here) and land use management (described on another page).

Level 1

Level 1 assumes that, by 2050, domestic food production takes priority imports, with livestock numbers increased by 10% over 2010 levels. This means approximately 200 000 more cows grazing on UK grass in 2050.

Level 2

Level 2 assumes that livestock numbers remain constant through to 2050. However due to manure yields increasing by 0.2% per year, more energy from waste is generated from agricultural by-products.

Level 3

Level 3 assumes that livestock numbers reduce by 10% by 2050. This is effectively the converse of level 1, and means there are approximately 200 000 fewer cows in the UK by 2050.

Level 4

Level 4 assumes a significant shift away from livestock production in the UK, potentially caused by us eating less meat, by switching from beef to less land-intensive meats such as chicken, or increasing the agricultural focus on bioenergy. Livestock numbers decline by 25% on 2010 levels, equivalent to 390 000 fewer cows by 2050.



Figure 1. A Hereford Bull. The 2050 Calculator assumes that every cow produces 400 oven dried kg of manure each year. Photo © US Department of Agriculture.

