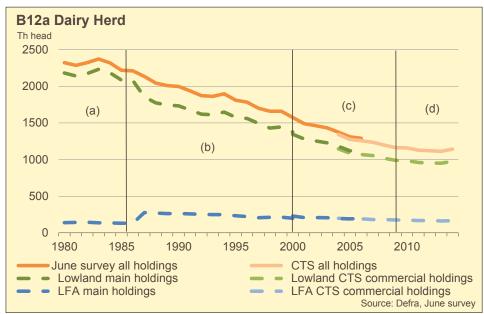
# Observatory monitoring framework - indicator data sheet

**Process: Farm Business** 

**Indicator B12: Livestock numbers** 

The 2003 CAP reforms removed the direct link between subsidies and production. This indicator monitors the number of livestock in England.



- (a) 1975 definition of LFA before widening to include Disadvantaged Areas, excludes minor holdings. (b) Current LFA, excludes minor holdings.
- (c) In 2006, the method of assigning LFA markers to holdings was revised and retrospectively applied from June 2000. All holdings.
- (d) Commercial holdings only.

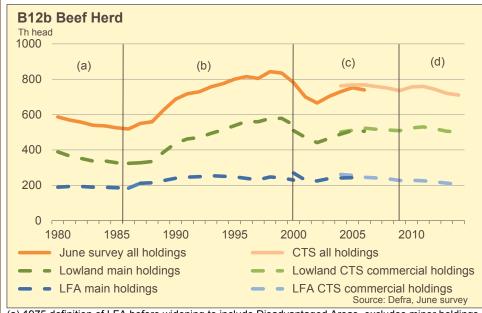
#### Dairy herd

Chart B12a shows the changes in the dairy herd in England.

Between 2013 and 2014:

- the dairy herd increased by 3% to 1,143 thousand head;
- this equates to a 3% increase on both lowland farms and on farms in the LFA.

There has been an overall long-term decline in the dairy herd since the introduction of milk quotas in 1984. Most of this decline has taken place on lowland farms, where the majority of dairy cows are found.



#### Beef herd

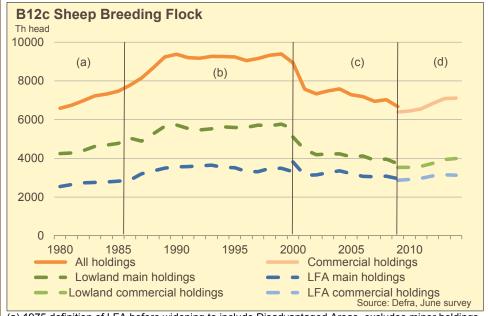
Chart B12b shows the changes in the beef herd in England.

Between 2013 and 2014:

- the beef herd decreased by 1% to 710 thousand head;
- this equates to a 1% decline on lowland farms and a 2.6% decline on farms in the LFA.
- (a) 1975 definition of LFA before widening to include Disadvantaged Areas, excludes minor holdings
- (b) Current LFA, excludes minor holdings.
- (c) In 2006, the method of assigning LFA markers to holdings was revised and retrospectively applied from June 2000. All holdings.
- (d) Commercial holdings only.

The number of beef cows in England increased rapidly during the late 1980s and 1990s due to the introduction of headage based subsidy schemes and the introduction of milk quotas leading some producers to switch from dairy to beef. Most of this increase took place on lowland farms. Changes to the subsidy rules and the 2001 Foot and Mouth Disease (FMD) outbreak led to a sharp reduction in the numbers.

Following the decoupling of subsidies in 2005 with the introduction of the Single Payment and poor underlying profitability of many beef cow enterprises, it was anticipated that there would be a subsequent reduction in beef cow numbers. Whilst there has been little overall change for England as a whole, numbers have reduced on LFA farms.



# Sheep breeding flock

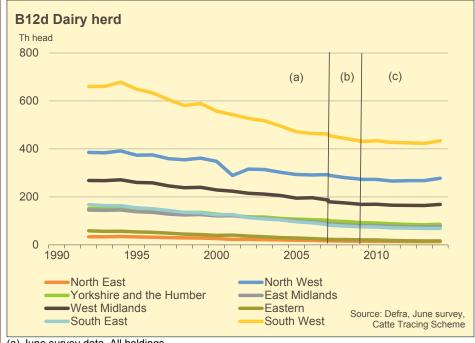
Chart B12c shows the changes in the sheep breeding flock in England.

Between 2013 and 2014:

- the breeding flock increased by 0.3% to 7,115 thousand head;
- this equates to a 1.2% increase on lowland farms which was offset by a 1% decrease on farms in the LFA.
- (a) 1975 definition of LFA before widening to include Disadvantaged Areas, excludes minor holdings
- (b) Current LFA, excludes minor holdings.
- (c) In 2006, the method of assigning LFA markers to holdings was revised and retrospectively applied from June 2000. All holdings.
- (d) Commercial holdings only.

Sheep numbers in England rose throughout the 1980s as headage based subsidy payments encouraged producers to increase numbers of breeding ewes. National quota limits forced a ceiling on ewe numbers during the 1990s, before changes to subsidy eligibility rules in 2000 and Foot and Mouth Disease in 2001 resulted in a sharp decline in ewe numbers; although the rate of decline was much greater on lowland farms. Agri-environment agreements are also likely to have resulted in a significant reduction in the number of moorland and fell ewes, especially in winter. Ewe numbers continued to decline until 2009. Recent increases in ewe numbers are linked to stronger market returns.

#### Regional data



# Dairy herd

Chart B12d shows the changes in the regional dairy herd in England.

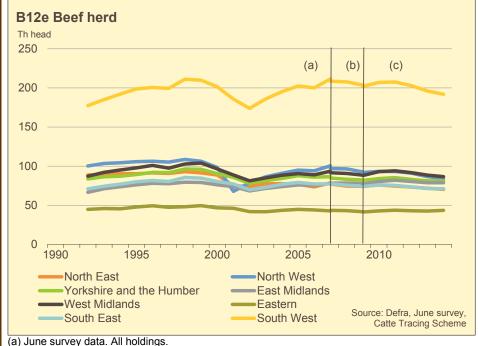
#### Between 2013 and 2014:

there were increases in all regions with the exception of the Eastern and the South East region that remained similar to 2013.

#### Since 2009:

there have been decreases in all regions with the exception of North West (+2%) and the South West (+1%).

- (a) June survey data. All holdings.
- (b) CTS data. All holdings.
- (c) CTS data. Commercial holdings.



#### Beef herd

Chart B12e shows the changes in the regional beef herd in England.

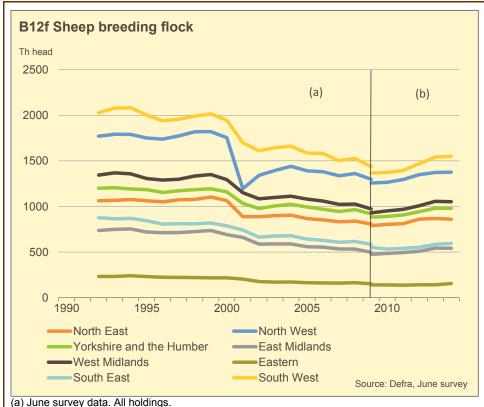
#### Between 2013 and 2014:

- the only region to have an increase was the Eastern:
- four regions experienced declines, North West (-3%), North East (-2%), West Midlands (-2%) and South West (-2%);
- the remaining regions saw no change from 2013.

#### Since 2009:

there have been decreases in most regions.

- (b) CTS data. All holdings.
- (c) CTS data. Commercial holdings.



# Sheep breeding flock

Chart B12f shows the changes in the regional sheep breeding flock in England.

#### Between 2013 and 2014:

- there were increases in three regions: Eastern (+10%); South East (+2%) and South West (+1%);
- the North East saw a decrease of 1%;
- the other regions saw little change.

#### Since 2009:

there have been increases in all regions.

- (b) June survey data. Commercial holdings.

This indicator was updated in September 2015. The next update will be in 2016.

## Further information and contact

Background information can be found in the accompanying fact sheet.

For further queries or information on this indicator contact Defra's Observatory team on +44 (0) 1904 455058 or email Observatory@defra.gsi.gov.uk

# **Observatory monitoring framework – indicator fact sheet**

**Process: Farm Business** 

Indicator B12: Livestock numbers

Indicator Changes in livestock populations

Data Dairy herd, beef herd and sheep breeding flock populations

Geographic coverage

England, English regions

*Years* 1980-2014 (England)

1992-2014 (English regions)

Source Defra

Origin of data June survey

Updates Provisional results for England from the June survey are usually published in

September each year with final results released in November. More detailed data at a regional or farm type level are usually available in the spring of the year following the

survey.

This indicator was updated in September 2015. The next update will be in 2016.

Background

Livestock have a range of impacts on the environment both beneficial and detrimental. Grazing is essential in the maintenance of certain habitats of high biodiversity value, and both the presence of livestock and the effects of grazing contribute to the landscape. However, overgrazing is detrimental, and livestock can cause problems of soil compaction, erosion and nutrient pollution. Cattle, in particular, are a major source of methane, a greenhouse gas.

Since June 2007, cattle data are no longer collected from farmers as part of the June survey. Data are now sourced from the Cattle Tracing System. The accompanying fact sheet gives further details.

Other key factors include stocking densities, timing of grazing and production systems. Some information on the timing of grazing and livestock housing is available from Defra's Farm Practices Surveys.

Statistical & methodological information

Until 1994, there was an annual census of all main holdings in England. In 1995 sampling was introduced in order to reduce the burden on farmers and growers. However a full census was held in 2000 and 2010 to meet EU requirements.

The sample is stratified by farm size with the sampling rate increasing with farm size (measured by standard labour requirement (SLR)). In 2006, holdings of less than 0.25 SLR were sampled at a rate of just 10% whilst all holdings over 5 SLR received a form. The overall sampling rate has decreased over time (see table below).

1994	1995	1996	1997	1998	1999	2000
100%	82%	82%	73%	74%	75%	100%

(a) 2001	2002	2003	2004	2005	2006	2007			
0.10/	4.40/	000/	0.50/	000/	0.40/	000/			
21%	41%	39%	25%	38%	31%	28%			
(a) reduced sample due to Foot and Mouth Disease									
2008	2009	2010	2011	2012	2013	2014			
19%	19%	100%	29%	28%	48%	28%			

Response rates in recent years have tended to be approximately 70%. Results for each question are produced using ratio raising techniques.

Since June 2007 cattle data have no longer been collected from farmers as part of the June survey. Data are now sourced directly from the Cattle Tracing System (CTS), from which comparable data are available from 2004. The total number of cows recorded by the June survey was similar to the total number of cows recorded by CTS, however the split between the dairy and beef herd was slightly different. This is because for the June Survey farmers were asked to record cows according to their main use on the farm. The data available from CTS allow classification only by the breed of the cow. Dual purpose breeds recorded on CTS have been split between the dairy and beef herds.

### Survey threshold

A survey threshold was introduced in June 2010 in order to exclude holdings with small levels of farming activity and meet the requirements of the EU Farm Structure Survey Legislation. From 2010 onwards, holdings will only be included in the June Survey if they exceed any of the following criteria (as defined by EU Farm Structure Survey Regulation EC 1166/2008):

- >5 hectares of agricultural land
- >1 hectare of orchards
- >0.5 hectares of vegetables
- >0.1 hectares of protected crops
- >10 cows
- >50 pigs
- >20 sheep
- >20 goats
- or >1,000 poultry.

Whilst this removed more than 40% of farms from the survey register, it has had little impact on total estimates of land use and livestock numbers, reducing national estimates of total land area by 2%.

#### **Register Cleaning**

In advance of the full census in 2010, a number of holdings were identified with whom no contact had been made for many years and that did not appear recently on any other Defra administrative system. There were a further substantial number of responses to the 2010 census for holdings that had not recently been surveyed indicating that they now had little or no agricultural activity. It is very likely that these holdings have been inactive for a number of years.

In order to derive comparable results for June 2010, the 2009 June Survey results have been revised to reflect both the survey threshold and the register cleaning exercise.

Further information

Defra June Agricultural Survey information and data can be found at:

https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/series/structure-of-the-agricultural-industry

Information and data from Defra's Farm Practices survey can be found at

https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/series/farm-practices-survey