

# Statistical Publication

## Agriculture Series

A National Statistics Publication for Scotland

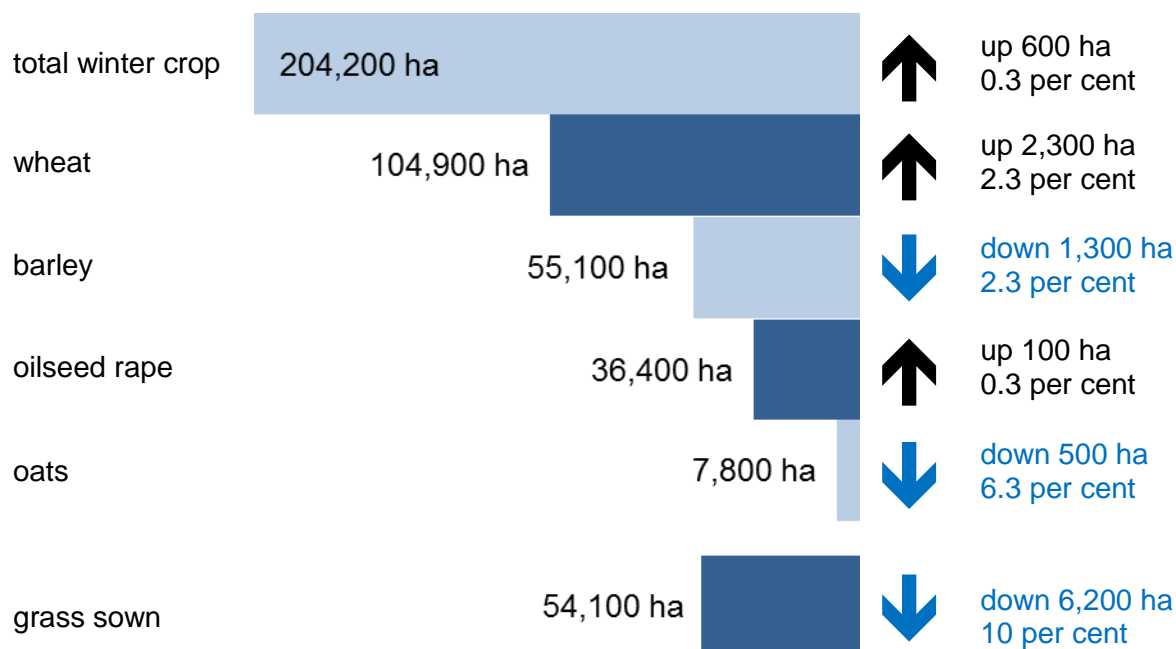


### RESULTS FROM THE 2014 DECEMBER AGRICULTURAL SURVEY

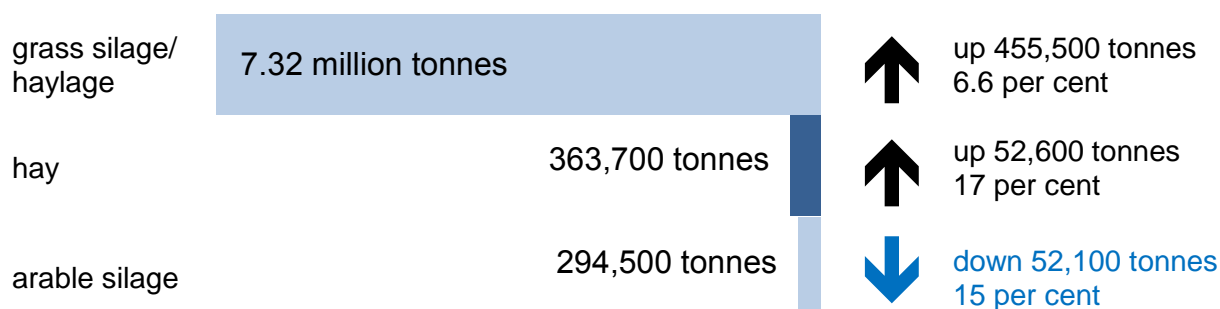
17<sup>th</sup> March 2015

#### 1. Main findings

The areas planted in December 2014 largely maintained those levels from the previous year, which witnessed a recovery following poor weather in the two preceding winters. Oats and grass showed the greatest changes (both dropping) from the previous year. [source: Table 1](#)



Following a favourable summer, overall production of silage increase in 2014, albeit driven largely by a rise in grass silage/haylage which is lower in nutrients than the other forms of silage. [source: Table 1](#)



The number of cattle, sheep and pigs reversed the falls seen last year, though there was a large fall in poultry numbers. [source Tables 2-5](#)

				Annual change compared to annual change seen in June
cattle	1.73 million	↑	up 6,300 0.4 per cent	decreased in June
...beef cows	422,900	↓	down 5,600 1.3 per cent	smaller decrease than in June
...dairy cows	174,400	↑	up 7,100 4.2 per cent	larger increase than in June
sheep	4.84 million	↑	up 77,700 1.6 per cent	smaller increase than in June
...breeding ewes	2.93 million	↑	up 134,100 4.8 per cent	decreased in June
...lambs	1.76 million	↓	down 22,600 1.3 per cent	increased in June
pigs	322,100	↑	up 28,700 10 per cent	larger increase than in June
poultry	11.9 million	↓	down 2.28 million 16 per cent	increased in June

Tractor numbers fell for the second year running, driven largely by a drop in the number of small to medium sized tractors. [source: Table 6](#)

tractors	39,800	↓	down 250 0.6 per cent
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## 2. Introduction

This publication contains results from the 2014 December Agricultural Survey, covering winter-sown crops, hay and silage production, livestock and machinery. It provides commentary and graphics on the latest annual changes, and trends over the past ten years, together with comparisons with June Census results.

Unlike the June Census, which collects results covering all agricultural holdings in Scotland, the results of the December Survey are derived from a representative sample of larger agricultural holdings only, involving about 13,800 holdings, and do not cover smaller agricultural holdings at all. These smaller agricultural holdings are generally those of less than one hectare in size, and in the June 2014 census accounted for only 9.5 per cent of agricultural land. The results have however been scaled up to include an estimate for all holdings (except where stated), in order that full comparison can be made with data from the June Agricultural Census.

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### 3. Commentary

#### 3.1 Winter Crops (Table 1)

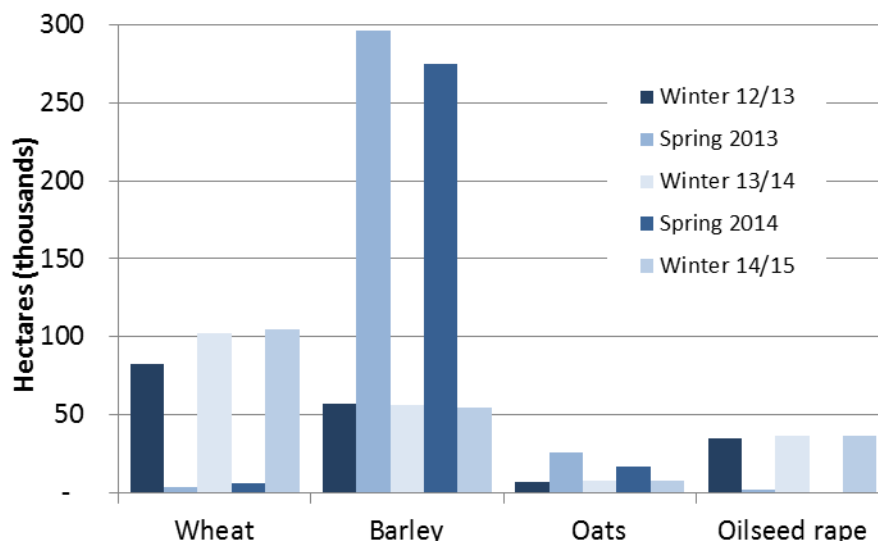
Year-on-year comparisons between 2013 and 2014 December Survey results show:

- A small increase in the area of winter crops, of 613 hectares (0.3 per cent) to 204,194 hectares.
- An increase in winter wheat of 2,339 hectares (2.3 per cent) to 104,909 hectares.
- A decrease in winter barley of 1,326 hectares (2.3 per cent) to 55,085 hectares.
- A decrease in winter oats of 519 hectares (6.3 per cent) to 7,753 hectares.
- A small increase in winter oilseed rape of 119 hectares (0.3 per cent) to 36,447 hectares.

Following the recovery – seen in 2013 – from the severe winter in 2012, cereal crops appear to be largely unchanged from 2013 levels. Oats were subject to the greatest change, down 6.3 per cent.

Chart 1 illustrates winter and spring crop areas from the 2012/13 and 2013/14 growing years, together with the latest December 2014 data. Spring varieties are prominent for barley and oats, with winter varieties prominent for wheat and oilseed rape. Changes between crops have accounted for more of the change than changes between winter and spring sowing, so increases in oats this winter may not result in a reduction in spring oats.

**Chart 1: Winter and Spring Crops<sup>1</sup>, 2013 and 2014 June Census, and December 2014 Survey**



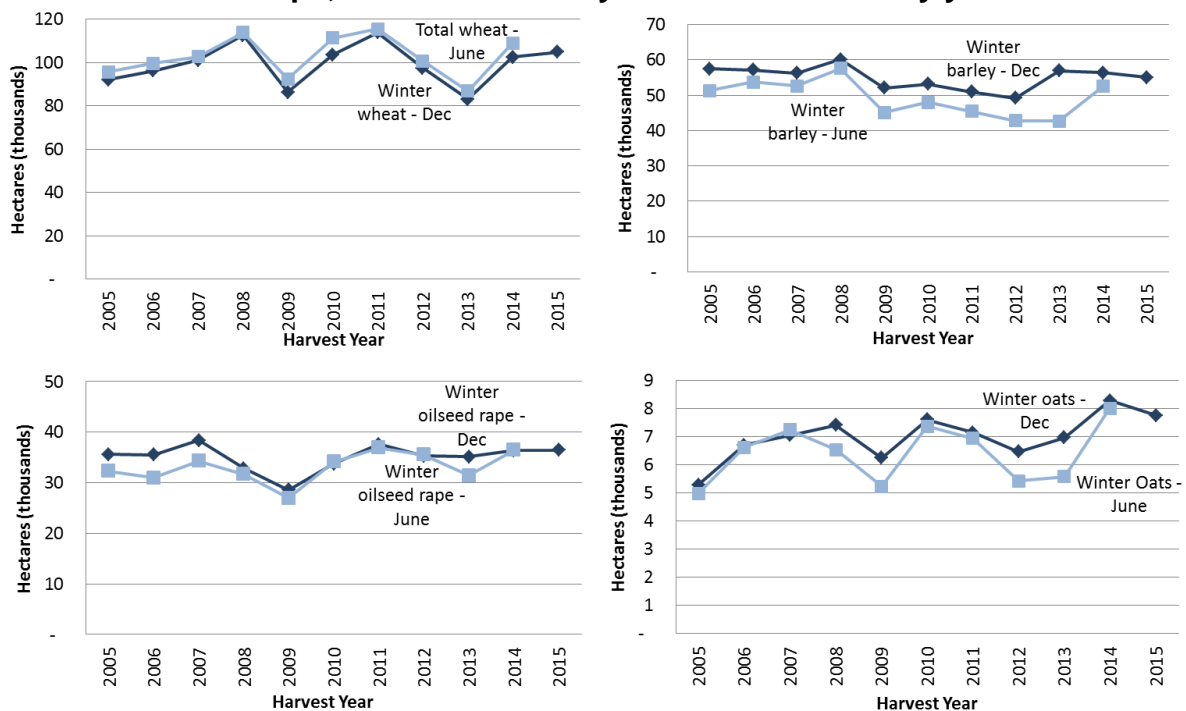
<sup>1</sup> Winter and spring varieties of wheat are not identified separately in the June Census. The spring wheat figure here represents the difference between the June and December reported figures.

The December Survey provides the first indication of trends of winter sown crops, with more comprehensive results produced from the June Census in the following year. June Census results are more comprehensive in the sense that they are based on a larger sample of holdings. In particular, since 2009, they include crop areas reported by holdings claiming Single Farm Payments and other schemes through the Single Application Form (SAF). This results in a more complete dataset.

Also, while the June Census results include a sample from smaller holdings of less than one hectare, these are excluded from December Survey results, although these generally comprise less than one per cent of winter crop areas. Since 2013 however, we have included estimates for minor holdings in order to provide a direct comparison.

Chart 2 shows trends in winter crops reported in the December Survey and June Census over the past ten years. Results are presented against the year of harvest, so for example the 2013 December Survey results are presented against June Census results from 2014. For wheat, the chart shows winter wheat reported in the December Survey and total wheat (including any spring wheat) reported in the June Census, as these are not split in the June Census.

**Chart 2: Winter crops, December Survey and June Census by year of harvest**



For most years, December Survey and June Census results are similar to each other. The total area of wheat reported in the June Census has generally been slightly higher than December Survey results. This is partly due to June Census results including small areas of spring wheat. Also, it is possible to sow winter wheat after the start of December, which will not be picked up by the December Survey. Among other crops, the June figures are often lower than those reported in

December. This is likely to be due to poor weather conditions resulting in failed winter crops which are then re-sown as spring crops.

Further information on long term trends of cereal and oilseed rape areas in the context of other land-use can be found in the ['Results from the 2014 June Agricultural Census'](#)<sup>2</sup> publication.

Further information on long term trends of cereal and oilseed rape production can be found in the ['Final Estimate of Cereal and Oilseed Rape Harvest 2014'](#)<sup>3</sup> publication.

### 3.2 Production of silage/haylage, hay and arable silage (Table 1)

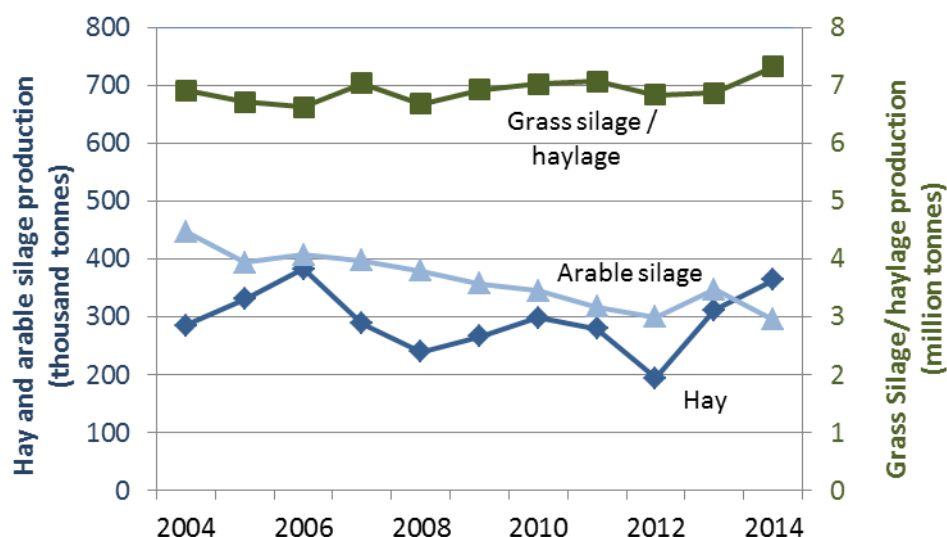
Chart 3 shows the production of silage/haylage, hay and arable silage between 2004 and 2014. These results include estimates for hay and grass silage/haylage production on minor agricultural holdings.

Year-on-year comparisons between 2013 and 2014 show:

- An increase in grass silage/haylage production of 455,492 tonnes (6.6 per cent) to 7.32 million tonnes.
- A decrease in arable silage production of 52,054 tonnes (15 per cent) to 294,507 tonnes.
- An increase in the production of hay of 52,634 tonnes (16.9 per cent) to 363,689 tonnes.

Please note that, in order to aid comparison of trends, the (larger) production of grass silage/haylage is shown against the right hand axis in Chart 3, which is expressed in terms of million tonnes, whereas the smaller hay and arable silage production is expressed in terms of thousand tonnes on the left hand axis.

**Chart 3: Production of hay, silage/haylage and arable silage<sup>4</sup>, 2004 to 2014**



<sup>2</sup> [www.gov.scot/Publications/2014/10/6277](http://www.gov.scot/Publications/2014/10/6277)

<sup>3</sup> [www.gov.scot/Publications/2014/12/2462](http://www.gov.scot/Publications/2014/12/2462)

<sup>4</sup> Data on arable silage excludes holdings of less than one hectare which account for approximately 1.7% of crops

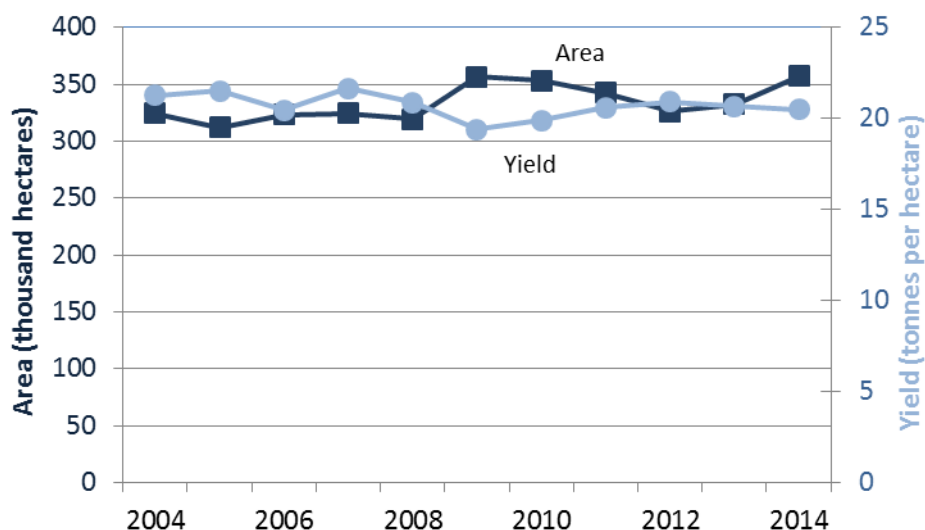
In terms of total tonnage, grass silage/haylage accounted for 92 per cent of production in 2014, with arable silage four per cent and hay four per cent. However, this does not take into account dry matter and nutrient content, which is higher per tonne in hay and arable silage.

Longer term trends show that the production of grass silage/haylage has remained fairly steady over the past ten years but with a higher than usual figure for 2014. Arable silage production has generally decreased each year since 2004 (with rises only in 2006 and 2013). There had also been reductions in hay production during 2011 and 2012 caused by the wet summer weather but, as with the winter cereal crops, production recovered strongly due, in this case, to drier than average summers in 2013 and 2014. In 2014, the hay production figure was the highest since 2006.

### 3.2.1 Grass Silage and Haylage : Areas & Yields

The production of silage is dependent on both the areas of grass cut and the yields per hectare. Chart 4 shows trends for areas and yields of grass cut since 2004. In 2014 the total area cut increased by 25,306 hectares (7.6 per cent) to 357,375 hectares (using the left hand axis), whereas yields decreased slightly, by 0.2 tonnes per hectare (0.9 per cent) to 20.5 tonnes per hectare (using the right hand axis).

**Chart 4: Area of grass cut for silage/haylage and yields 2004 to 2014**



For silage and haylage production, several cuts of grass can be taken from the same area in a single year. The yields reported here correspond to total production, which incorporates all cuts of grass taken from the corresponding area.

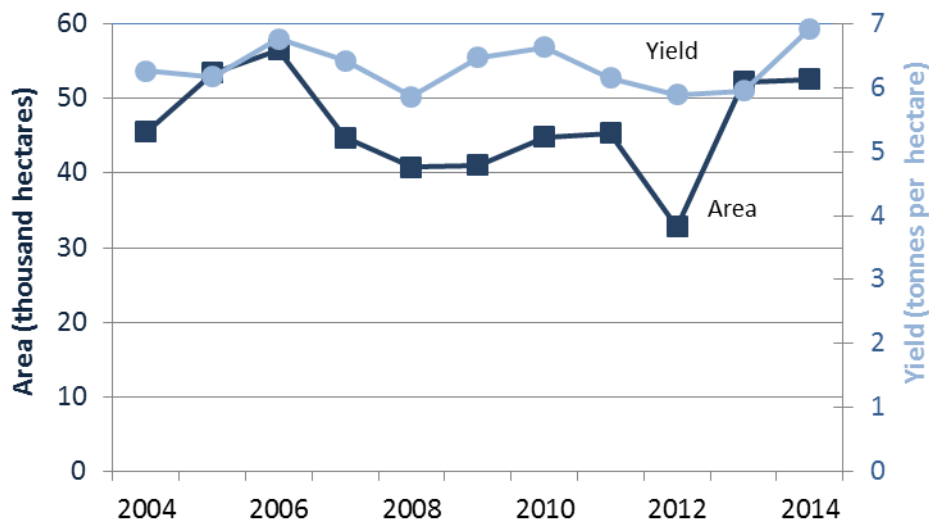
In 2014, the total area of grass reported on the December Survey for the production of hay, silage and haylage was 409,906 hectares. This represents 31 per cent of the 1.31 million hectares of grass area reported on all holdings in the 2014 June Census.



### 3.2.2 Hay: Areas & Yields

Chart 5 illustrates how the area of grass cut for hay has maintained its level following the recovery from the weather related fall in 2012. It also shows that, over the past ten years, hay yields have largely been maintained, but with a higher than usual value in 2014.

**Chart 5: Area of grass cut for hay and yields of hay, 2004 to 2014**



### 3.2.3 Arable Silage : Area, yield and production

Separate information on the area of arable silage is not collected on the December Survey, so it is not possible to produce a corresponding analysis of areas and yields. Production of arable silage will be determined by a range of factors. These include the areas of arable crops, which are collected on the June Census, but also decisions by farmers on how much of this crop to use for arable silage. This in turn may be determined by the quality of these arable crops, with poorer crops generally being used for animal feed, including arable silage.

### 3.2.4 Grass sown

Data for the area of grass sown are only available for larger holdings (generally at least one hectare), and results exclude smaller holdings which, in June 2014, accounted for approximately 6.6 per cent of the total area of grassland (temporary and permanent grass).

The area of grass sown on larger holdings in the last ten years has ranged between 40,812 and 60,329 hectares. In 2014 there was a decrease of 6,210 (10.3 per cent) to 54,119 hectares. The total area sown at 1<sup>st</sup> December 2014 equates to 4.4 per cent of the total grass area on larger holdings at 1<sup>st</sup> June 2014 (1.22 million hectares). Of the total sown, 18,043 hectares was under-sown to cereal or other crops (grass and cereals grown together allowing grass to establish ready for autumn grazing whilst still giving a useful yield of grain) and 36,076 hectares was directly sown or reseeded.

### 3.3 Livestock overview

The next four sections present livestock results from the December Survey alongside comparisons with the June Census. The December Survey provides complementary information to the June Census, as it provides a snapshot of the livestock populations for the winter months, as at 1<sup>st</sup> December. A more comprehensive analysis of longer term livestock trends can be found in [‘Results From the 2014 June Agricultural Census’](#)<sup>5</sup>

### 3.4 Cattle (Table 2)

Year-on-year comparisons between 2013 and 2014 show:

- An increase in total cattle of 6,293 (0.4 per cent) to 1.73 million – in contrast to the 0.2 per cent decrease reported between June Census results.
- A decrease in the number of beef cows<sup>6</sup> of 5,581 (1.3 per cent) to 422,923 – a smaller decrease than the 2.3 per cent reported between June Census results.
- An increase in the number of dairy cows<sup>7</sup> of 7,072 (4.2 per cent) to 174,458, the largest rise since our CTS time series began in 2006. This follows a 2.4 per cent rise in the June Census results.

Despite the rise in the number of cattle this year compared to December 2013, cattle numbers in both the December Survey and the June Census have been generally falling since the 1970s. Differences in June comparisons and December comparisons for the size of the fall may relate more to decisions regarding when to slaughter livestock, which may depend more on weather conditions and shorter-term price variations.

Contrary to the longer term trend, the number of dairy cows, and of dairy cattle in general, has seen annual increases in both the June and December 2014 figures, with consistent rises among dairy cows since 2011. This trend may be partly attributable to the relative profitability of the dairy sector and more recently to the ending of milk quotas this year.

Chart 6 gives a comparison of trends over the past seven years for the numbers of beef and dairy cattle<sup>8</sup> from the December Survey and June Census. It shows that numbers vary little between December and June, though a greater seasonality is evident among beef cattle numbers. Over the past seven years December figures for beef cattle have ranged between being 3.4 per cent lower than June Census results (in 2009) and seven per cent lower (in 2011). For the dairy herd the differences have been much smaller, ranging between being 1.2 per cent lower than June Census results (in 2011) and 1.8 per cent higher (in 2013).

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<sup>5</sup> [www.gov.scot/Publications/2014/10/6277](http://www.gov.scot/Publications/2014/10/6277)

<sup>6</sup> This refers to female beef cattle aged two years and over, with offspring. If all female beef cattle aged one year and over are considered, there was a 1.2 per cent decrease to 678,173.

<sup>7</sup> This refers to female dairy cattle aged two years and over, with offspring. If all female dairy cattle aged one year and over are considered, there was a 3.3 per cent increase to 279,563.

<sup>8</sup> This chart includes all cattle aged one year and over.

**Chart 6: Beef and Dairy cattle, June and December, 2006 to 2014**

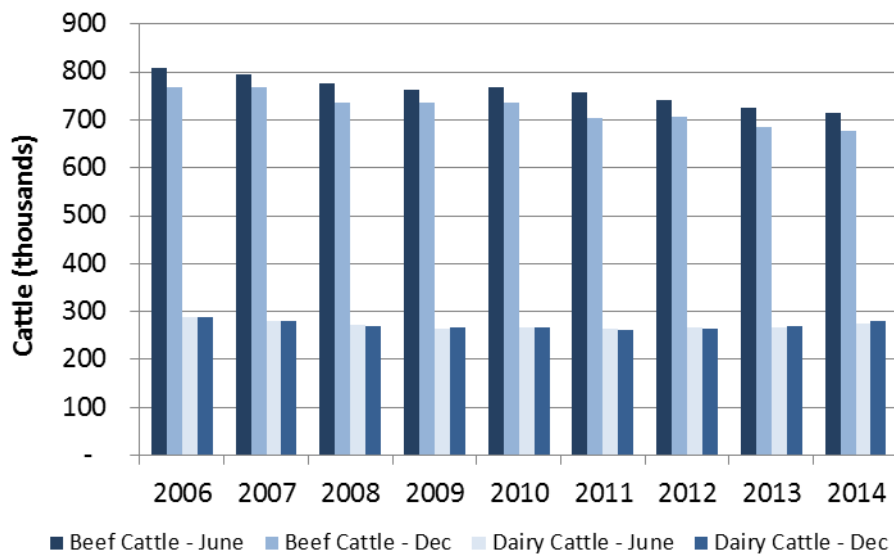
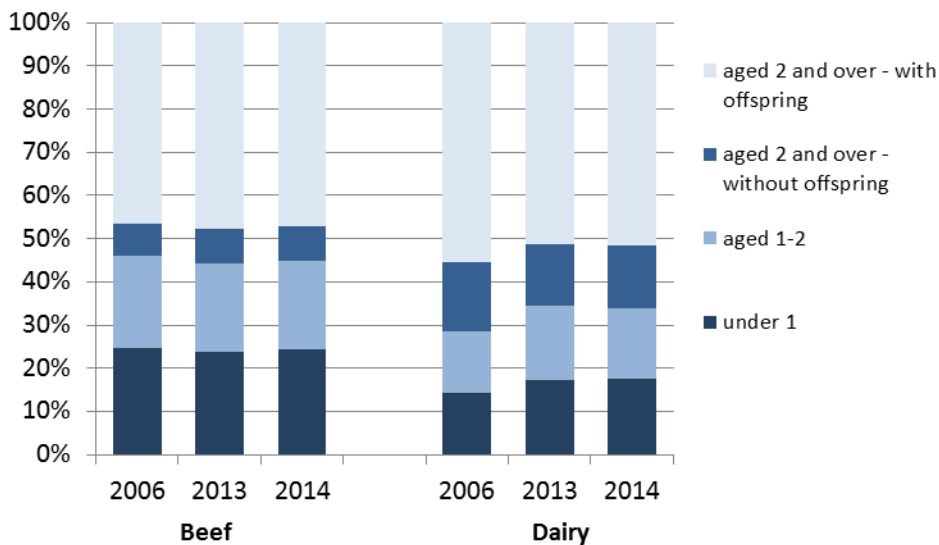


Chart 7 shows the respective age profiles of beef and dairy cattle in December. While there has been a decline in the total number of beef cattle over the last eight years, the structure of the herd has been largely consistent. Among dairy cattle however, the relatively small fall in numbers over the last eight years has been driven by a fall in older cattle, while numbers of calves and dairy cattle aged between one and two have risen over the period.

**Chart 7: Age profile of beef and dairy cattle, December 2006 and 2014**



### 3.5 Sheep (Table 3)

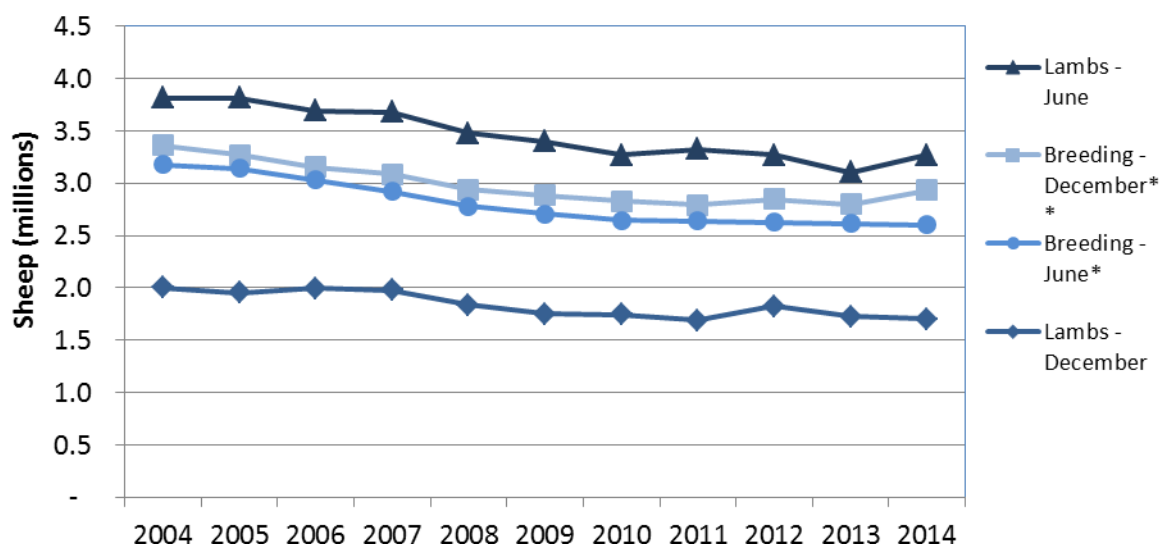
Year-on-year comparisons between 2013 and 2014 December Survey results show:

- An increase in the total number of sheep of 77,708 (1.6 per cent) to 4.84 million seen for the December survey, a slightly smaller annual increase than the 1.9 per cent shown in the June Census.
- An increase in the breeding flock of 134,072 (4.8 per cent) to 2.93 million – contrasting with a 0.5 per cent decrease reported between consecutive June results.
- A decrease in the number of lambs of 22,600 (1.3 per cent) to 1.70 million – contrasting with the increase of 5.3 per cent rise in the number of lambs seen between consecutive June results.

Chart 8 shows trends over the past ten years for lambs and for the breeding flock from the December Survey and June Census. The breeding flock has seen reductions of 18 and 13 per cent, for the June Census and December Survey respectively, over the past decade, though this decline appears to be levelling off at around 2.8 million (December Survey).

There has also been a decrease in the lamb population over the past ten years, with the June census down 14 per cent, and the December Survey down 15 per cent. The December-to-December drop in lamb numbers in 2014 contrasts with the rise seen in June. Changes in December figures are affected by decisions on when to slaughter rather than just the success of the lambing season as at June.

**Chart 8: Lambs and the female breeding flock, June<sup>9</sup> and December<sup>10</sup> 2004 to 2014**



<sup>9</sup> The June breeding flock comprises ewes used for breeding in the previous season.

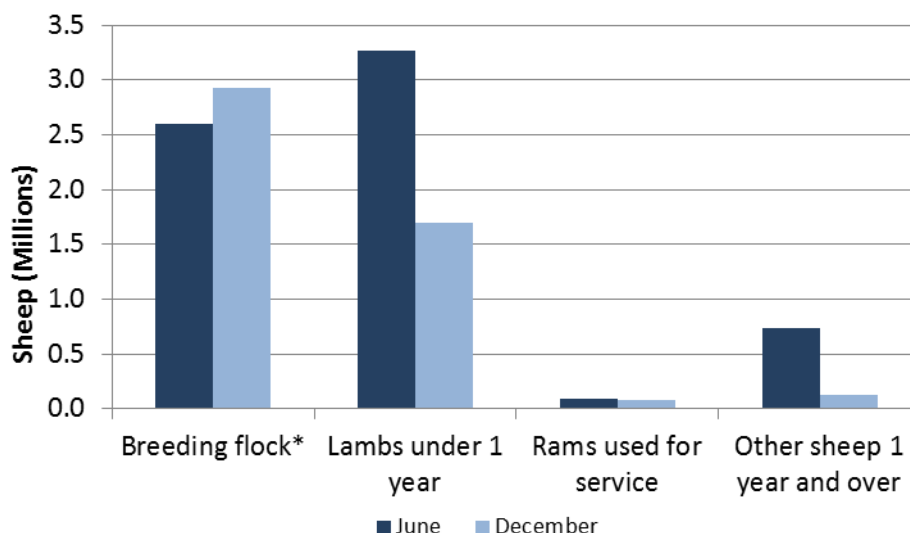
<sup>10</sup> The December breeding flock comprises ewes kept for breeding and shearing ewes or gimmers put to ram within the calendar year.

Over this period, the December Survey results for breeding females have ranged between being 4.0 per cent higher (in 2005) and 12.5 per cent higher (in 2014) than June Census results. Some of this disparity may be down to the differences between how sheep figures are collected in June and December, with the June Census reporting 'ewes used for breeding in the previous season' and the December Survey reporting "ewes kept for breeding" and "shearling ewes or gimmers put to the ram". Not all of the breeding intentions reported in December may have been carried out or been successful by the following June.

Greater differences occur between December Survey and June Census results when considering other categories of the profile of sheep, which are at different stages of the seasonal production cycle when each survey is undertaken. Chart 9 shows the profile of the sheep in June and December 2014. The biggest difference is in "lambs/sheep aged under one", with 1.57 million (48 per cent) fewer in December, reflecting the large number of lambs which are finished and slaughtered in the autumn. However, this reduction of 1.57 million between June and December 2014 compares with the figure of 1.38 million (44 per cent) between June and December in 2013, reflecting the greater number of lambs born in Spring 2013 as well as slaughter decisions.

There is also a large difference in "other sheep aged one year and over", with 607,110 (83 per cent) fewer in December. It should be noted that most of the sheep counted as "other" in June will be counted within the breeding flock by December, having replaced older ewes which have been slaughtered after coming to the end of their productive lives.

**Chart 9: Profile of sheep<sup>11</sup>, June and December 2014**



<sup>11</sup> The June breeding flock figure comprises ewes used for breeding in the previous season. The December breeding flock figure comprises ewes kept for breeding and shearling ewes or gimmers put to ram within the calendar year.

### 3.6 Pigs (Table 4)

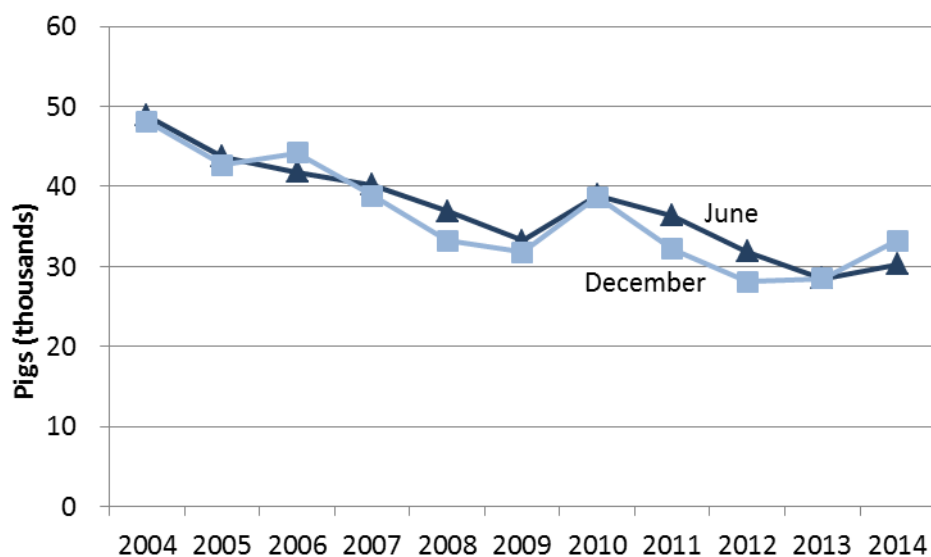
Year-on-year comparisons between 2013 and 2014 December Survey results show:

- An increase in the total number of pigs of 28,666 (9.8 per cent), up to 322,134. The rise was larger than the 2.7 per cent annual increase reported in the 2014 June Census results.
- An increase in breeding pigs of 4,703 (16.5 per cent) up to 33,200 – again considerably higher than the five per cent annual increase reported in the 2014 June Census results.

This year's rise in overall pig numbers contrasts with the general declining trend since the late 1990s and largely reverses the fall in the number of fattening pigs seen in December 2013.

Chart 10 shows trends over the past ten years for breeding pigs from the December Survey and June Census. The long term trends are fairly similar, with the December Survey showing a decrease of 14,899 (31 per cent) over the ten year period, compared to a decrease of 18,602 (38.1 per cent) from the June Census.

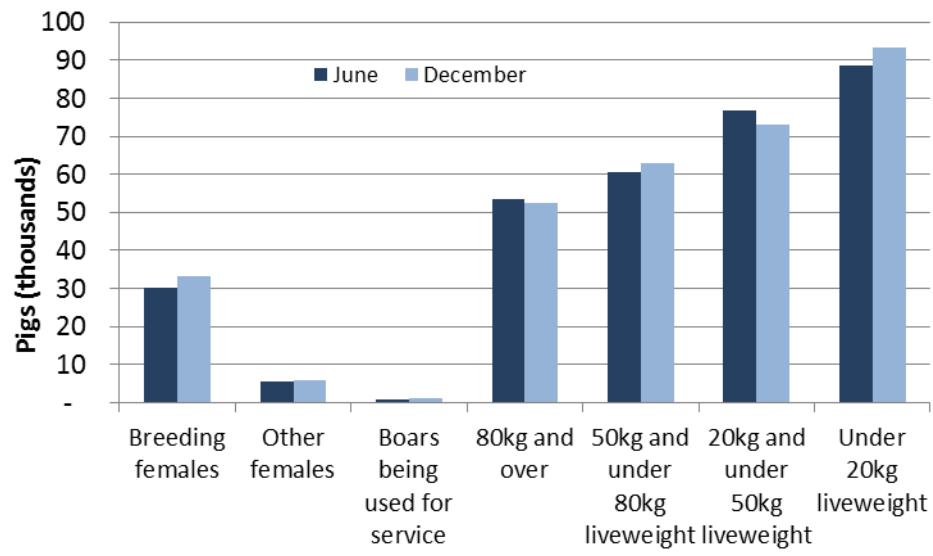
**Chart 10: Breeding pigs, June and December 2004 to 2014**



Over this period, December Survey results for breeding pigs have been lower than June Census results in most years, but range from being 11.8 per cent lower (in 2012) to 5.7 per cent higher (in 2006).

Chart 11 compares the profile of pig populations in June and December 2014. The biggest difference is for the smaller pig categories (under 20kg and 20 to 50 kg), with a 4,837 (5.5 per cent) rise in the former, and a 3,793 (4.9 per cent) drop in the latter recorded from June. Looking back over the last ten years, there tends to be fewer small pigs in December but there are not always more of the larger pigs. However, the pig populations do not show clear seasonal profiles as with other livestock, as the production cycle is not annual, with pigs able to produce two sets of litter in a year.

**Chart 11: Pig profile, June and December 2014**



### 3.7 Poultry (Table 5)

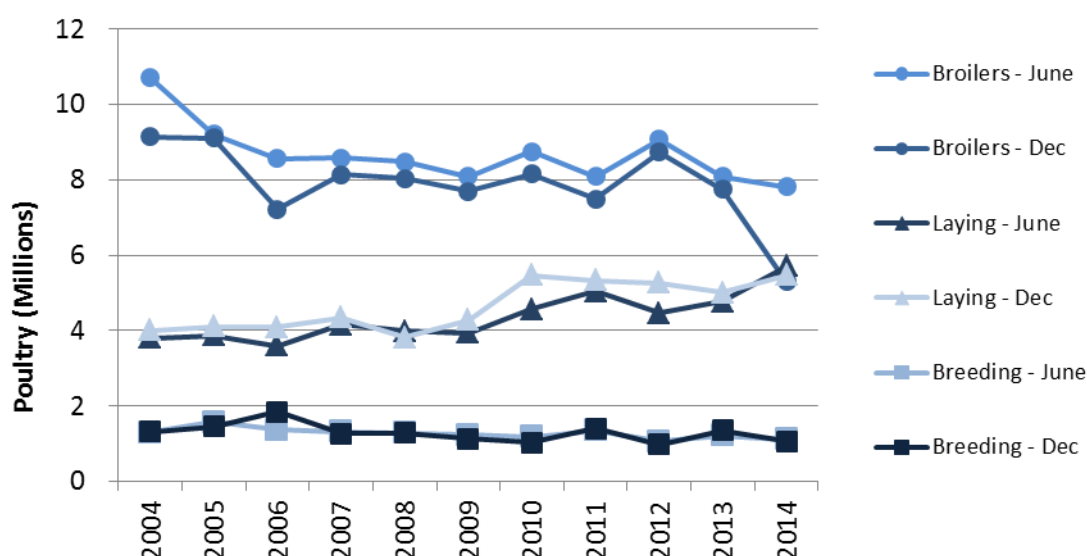
Year-on-year comparisons between 2013 and 2014 December Survey results show:

- A decrease in the total number of poultry of 2.28 million (16 per cent) to 11.91 million - greater than the 3.9 per cent annual decrease reported in the 2014 June Census results, and the lowest December figure of the last ten years.
- An increase in birds for laying eggs for eating of 464,719 (9.3 per cent), with the number of layers rising to 5.47 million – though smaller than the 19.5 per cent increase reported in the 2014 June Census results.
- A decrease in the number of broilers of 2.45 million (31.6 per cent) to 5.3 million – compared with the 3.5 per cent fall reported in the 2014 June Census results and representing the lowest broiler figures since 2003 (the earliest date for which we have comparable December data for all holdings<sup>12</sup>).

Chart 12 shows trends over the past ten years from the December Survey and June Census for broilers (used for meat production), laying fowls (used for egg production) and breeding birds (used to produce broiler and breeder chicks). It should be noted that there is some inherent variability in the annual poultry data, which can be affected by short-term operational factors.

For some years, the chart shows large differences in the number of broilers and layers between June and December. This variability can occur if large poultry units reduce the number of birds on their holdings over the survey date, for operational reasons such as the cleaning of premises. Also the poultry production cycle is very short compared to other livestock, which provides producers with the flexibility required to change production levels in response to market conditions.

**Chart 12: Poultry, June and December 2004 to 2014**



The primary driver in the fall in poultry figures in December 2014 was the fall in broiler numbers. While variability is a feature of poultry figures, the closure of a

<sup>12</sup> Earlier data is available, however a different methodology was used to calculate them



number of holdings across the country which previously housed large numbers of broilers can explain much of this drop. The fall in the number of broilers follows a drop of 0.98 million in December 2013 and significant restructuring over the period.

The figures for laying fowls had been steady at about four million until 2009, before increasing noticeably to a peak of over five million in 2010. Over the ten year period the December Survey results show an increase of 1.47 million (37 per cent) compared to an increase of 1.92 million (50 per cent) from the June Census.

The trends in the annual number of breeding birds have been fairly constant with the December Survey and June Census both averaging just under 1.3 million birds over the ten year period.

### 3.8 Machinery (Tables 6, 7 and 8)

Information on machinery is only collected through the December Survey (of larger holdings only, generally greater than one hectare) and not the June Census. This means that we have been unable to scale figures up for smaller holdings, as we do not have a proxy measure to use from the June Census. The results published here relate therefore only to the larger holdings.

Information on tractors and transport is collected every December but questions on other machinery types are alternated between odd- and even-numbered years. Commentary in this section only refers to trends in tractors and to those machinery types for which information is collected in odd years. Results for machinery information collected in odd years is presented in Table 7 for reference.

While data on lorries, vans, pick-ups and all-terrain vehicles are requested in both odd and even years, these questions are located within different sections in each year (under questions headed 'Load handling and transport in odd-numbered years, and under 'Miscellaneous' in even-numbered years). This appears to result in a response effect, with higher numbers apparent in even years (when classed as 'Miscellaneous'). As a consequence, data from odd and even-numbered years are not directly comparable and have been listed separately in Table 6.

When considering trends in machinery, it is worth noting that there has been a real terms increase in the value of agricultural contract work being carried out over the past ten years (of over 30 per cent, as reported in the publication, '[Total Income from Farming Estimates for Scotland, 2012 to 2014](#)<sup>13</sup>'). If it is the case that there are more holdings using contractors and their machinery to carry out certain work, it is possible that this may have led to a decreases in some of the machinery categories observed in the survey results.

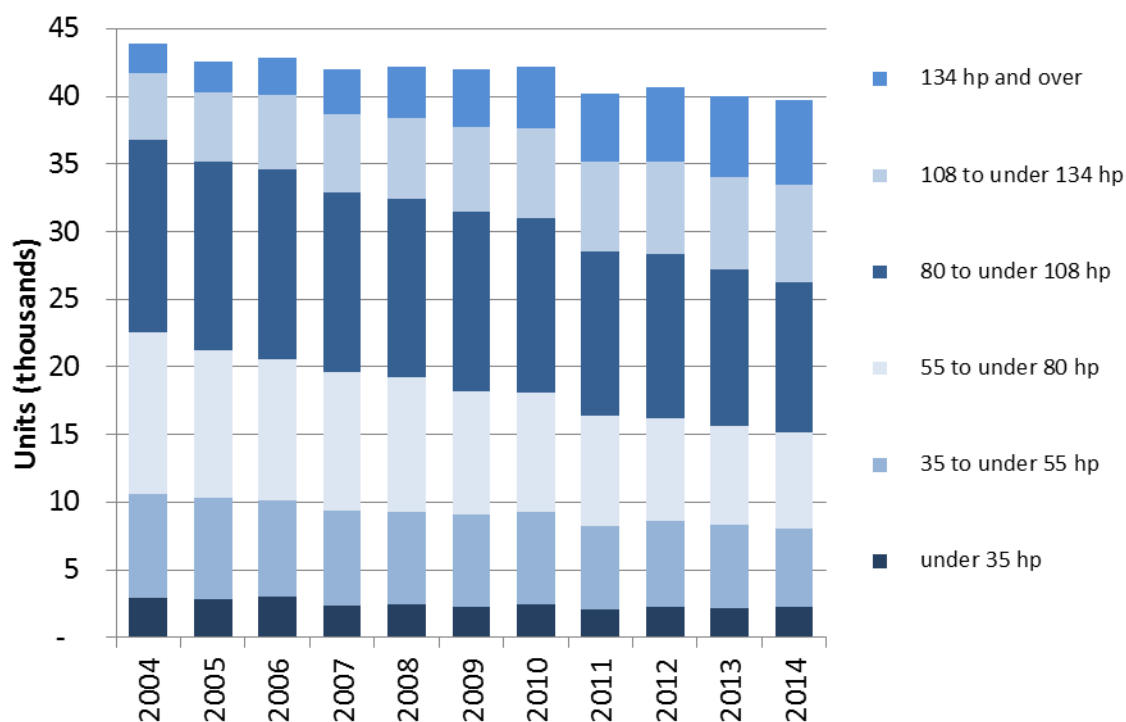
#### Tractors (Table 6)

Chart 13 shows that the number of tractors on larger holdings has declined over the last ten years by 4,112 (9.4 per cent) to 39,762. Over this period, the number of more powerful tractors (those over 108 horsepower) has almost doubled, from 7,041 to 13,468, whilst the number of less powerful tractors has declined, most notably those between 55 and 80 horsepower which have fallen from 11,951 to 7,060 (a drop of 40.9 per cent) over the period. All categories of tractors corresponded with this trend, with the exception of tractors under 35 horsepower, which saw an increase of 98 (4.5 per cent) since 2013.

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<sup>13</sup> [www.gov.scot/Publications/2015/01/5539](http://www.gov.scot/Publications/2015/01/5539)

**Chart 13: Tractors on larger holdings by horsepower, 2004 to 2014**



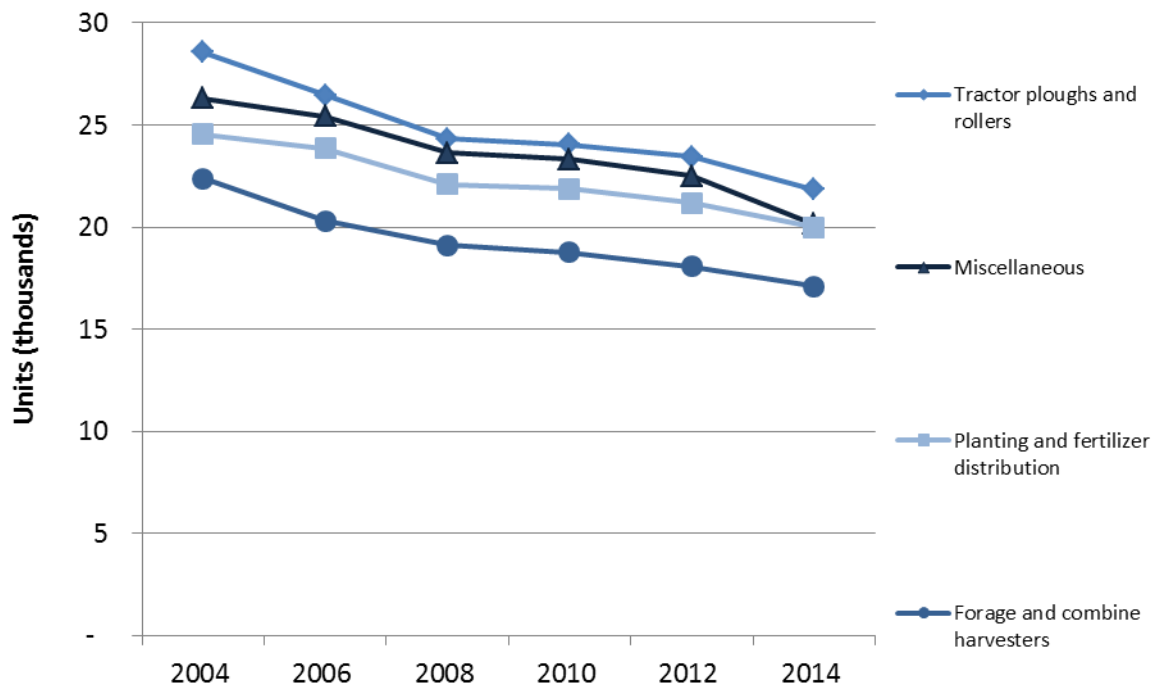
**Other machinery (Table 8)**

Chart 14 shows the trends for other types of machinery for which information is only collected on even years of the survey. These charts show that there have been downward trends for all groups of machinery since 2004 except for transport and that the patterns of the trends among these categories are broadly similar, with a steep decline up to 2008 followed by a gentler decline since.

With the exception of transport, all the machinery categories have fallen between 18 and 26 per cent (with forage and combine harvesters, and drying machinery both showing the greatest drop). Transport machinery has risen 43.6 per cent over the period, largely driven by a rise in the number of four-wheel drive vehicles.

In the 2014 survey we amended the categories for transport vehicles so that they matched those collected in odd-numbered years (see Table 6). This meant the addition of a category for “Land Rover or similar 4-wheel drive vehicles”, of which there were usually around 8,000 recorded in odd-numbered years. It is noticeable that what is probably the equivalent category in previous even-numbered years, “Lorry, vans and pick-ups up to 2 tonnes capacity”, has fallen by about 3,000, which means some were including Land Rovers in this, while others were not.

Chart 14: Various Machinery, 2004 to 2014



## 4. Notes

### 4.1 Background

This publication contains results for the December Agricultural Survey for 2014 and includes trends for the last ten years where available (we have only included CTS data from 2006, as this was the first year for which reliable data are available). Where appropriate, comparisons have been made between results of the December Survey and the June Agricultural Census.

### 4.2 Uses of the information

The December survey is conducted for a range of purposes. The statistics help the government to form, monitor and evaluate policy, and to assess the economic well-being of the agricultural sector.

Most of the data collected is required by the Statistical Office of the European Communities, specifically Council Regulation No 1165/2008 which sets out requirements for provision of cattle, pig, sheep and goat statistics in both May/June and November/December. It defines the category, age or weight of livestock for which statistics are to be provided and specifies the provision of quarter-year or half-year production forecasts. There is also a separate EC Regulation covering the provision of winter crops. This information is collated by DEFRA for submission at member state (UK) level.

December Survey results are not as widely used as results from the June Census as the survey only covers larger holdings, generally of at least one hectare, whereas the June Census is representative of all agricultural holdings in Scotland. However, December results supply supplementary information not available through the June census on machinery, winter livestock levels, grass sown as well as detail on hay and silage production.

#### **Some examples detailing how the December Survey data are or have been used are:**

- Estimates of Total Income From Farming (TIFF), which are used to measure the value of agricultural productivity in Scotland. The December Survey, which gives approximately end-year livestock numbers, are more useful for the calculation of calendar-year production. For example, although the June Census records the number of lambs present in Summer each year, it does not (on its own) give an indication of the volumes of finished sheep and lambs that are being processed within the calendar year.
- It is also useful to monitor livestock maintained for the next breeding season and winter crops in December so that the farming industry can better understand what to plan for in the coming year.
- The data on machinery that is collected on the December Survey is also used to help estimate some of the input costs incurred within Scottish agriculture (for example, machinery repairs, depreciation, fuel and asset worth).

- The December Survey contributes to the formulation and publication of UK statistics on agriculture. These publications are co-ordinated by DEFRA. More details are available here.

[www.defra.gov.uk/evidence/statistics/index.htm](http://www.defra.gov.uk/evidence/statistics/index.htm)

### **Results from the December survey are available to the public as follows:**

This statistical publication is available for download from the Scottish Government website along with previous releases of December Survey results:

[www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubFinalResultsDecCensus](http://www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubFinalResultsDecCensus)

Headline results for TIFF (mentioned above) are published each January. These can be accessed as follows:

[www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/ResultsTIFFBI](http://www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/ResultsTIFFBI)

Economic Report on Scottish Agriculture (ERSA) is a compendium publication containing detailed statistics on Scottish agriculture, combining further information from Total Income From Farming (TIFF – see above for more details), Farm Accounts analysis (income and expenditure statistics by different farm types) and additional statistics/analysis from the June census.

[www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubEconomicReport](http://www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubEconomicReport)

### **4.3 Methodology - data collection**

The December Survey was sent to around 13,800 main holdings in 2014. These were selected using stratified random sampling where the sampling frame comprised of a list of all the larger (generally over one hectare) holdings in Scotland stratified by farm size and region as measured through the 2014 June Census. This spread is intended to ensure a good representation across the country and by farm size. Optimal allocation was used to calculate the sample size required in each strata in order to maximise precision of results. Following this a random sample is selected from each strata. The sample was topped up with holdings which were sent a form in the previous December survey (2013) but didn't respond. This may have impacted on response rates compared with previous years.

The results are based on information returned from approximately 8,650 holdings, providing a response rate of 63 per cent.

### **4.4 Methodology - non-response**

In Scotland there are around 52,300 agricultural holdings registered with the Scottish Government. We use these register details to maintain a full holding-level data set of Scottish agriculture for statistical purposes. This provides us with virtually complete coverage of agricultural activity in Scotland. However, please note that:

- we very rarely conduct a full census of holdings as this would place an unnecessary burden on farmers;

- for the selected holdings that are surveyed, not all farmers return data to us;
- where we have gaps in our holding-level data set, we maintain records by producing estimates.

The December Survey is representative of larger holdings (generally over one hectare in size around), of which there were 21,600 at December 2014. Estimates are produced for those holdings which were (a) large enough but not sampled, (b) surveyed but did not provide a response, and, for some variables, (c) smaller holdings.

Two stages of estimation are undertaken to calculate the December results where holdings are not included in the sample, or do not return data:

- (i) For items collected both in the June Census and December Survey (livestock items and winter crops), a trending technique is applied to estimate the current year December values. The holdings are divided into strata using farm size and region. Where holdings have reported for both surveys, the total change between June and December for holdings within individual stratum are calculated. These rates of change are then applied to June Census results.

From 2013, the trending methodology was refined to provide improved estimates to account for the fact that holdings often report farming a particular crop or livestock in either the December Survey or June Census only. The previous method will have partially suppressed these trends. A time series for all items has been provided back to 2008, calculated using the new methodology. For years prior to 2008, the previous estimates have been adjusted by the percentage difference between the old and new methodologies.

For 2014, the trending methodology is being modified slightly further, so that a holding level dataset can be created. This will allow for estimates of the numbers of holdings growing crops and keeping livestock. Such a change will have little impact on the crop/livestock totals within this publication and 2014 figures are comparable with previous years.

- (ii) For items only collected in December, such as machinery, arable silage production and grass sown, data in each strata are simply scaled up proportionally to account for non-response/inclusion in order to calculate estimates for all of those larger holdings within the scope of the survey. Estimates for smaller holdings, where none are within scope of the survey, cannot be made, as there are no data to scale up. However, for hay and grass silage/haylage this is possible, based on proportions of grass grown recorded in the June Census.

#### **4.5 Collection of Cattle Data through the Cattle Tracing System**

Statistical data on cattle populations have historically been collected through the June census and December survey in Scotland. In order to reduce the burden on survey respondents data for the December Survey has been obtained through

the Cattle Tracing System (CTS), an administrative data source held by the British Cattle Movement Service (BCMS) which holds records of cattle numbers and movements across Great Britain. These were used for the first time in Scotland in the publication of results from the 2013 June Agricultural Census.

More information about CTS data, particularly in relation to the differences between CTS data and data collected via paper forms prior to 2013 can be found in section 4.5 of the publication '[Results from the December Agricultural Survey, 2013](#)'<sup>14</sup>.

#### 4.6 Data quality

Data undergo several validation processes as follows; (i) checking for any obvious errors on the paper census forms upon receipt, (ii) auto-checking and identifying any internal inconsistencies once loaded onto the initial database, (iii) auto-checking for any sudden changes in comparison with previous annual returns and other holdings, (iv) assessing any trends or switches in item areas or quantities that look unreasonable.

If necessary, farmers are contacted to ensure data are correct. Additional quality assurance is provided at the later stages by utilising expert knowledge within the Scottish Government and the agriculture industry.

#### 4.7 Main sources of bias and other error

The December Survey will be subject to **measurement bias** since we are reliant on farmers completing the form accurately. Ideally livestock counts should be undertaken to ascertain precise numbers of animals but, given time constraints, exact numbers of livestock are likely to be estimated. This bias will impact particularly on sub categories of livestock (e.g. weight categories for pigs or ages of cattle) rather than the total population for a livestock type. Other categories likely to be estimated by farmers include the tonnage of hay and silage produced in the year.

Guidance notes detailing what to include on the form are supplied to avoid farmers misreporting information. With regards to livestock, we require farmers to report those animals located on the holding that are either owned by the farmer or animals that are owned by someone else but are held under formal contract. It has been noted that animals are sometimes double counted in situations where animals are held under contract with both the owner of the livestock and the farmer looking after the livestock reporting the animals. To avoid this double counting we have added specific guidance on the form itself in attempt to avoid this **reporting bias**.

The survey may also be subject to an element of **non-response bias** with farmers on certain farm types being more likely to respond to the survey than others. This means that we need use older information to estimate values for farm types less likely to supply us with current information.

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14 [www.gov.scot/Publications/2014/03/6349/4](http://www.gov.scot/Publications/2014/03/6349/4)



A stratified random sample, grouped by farm size and region, is used to select holdings for the December survey. Individual strata are sampled to different extents. However, in estimating the results we weight by strata in order to produce a full dataset and to counteract the effects of some strata being sampled to a greater degree than others. This helps to address any **sampling bias** that is inherent in the sample design.

#### 4.8 Survey burden

In December 2011, a representative sample of around 110 farmers participated in a telephone survey in order to calculate the burden of participating in the December survey. It was not considered beneficial to repeat this survey each year, however we do have updated figures for hourly rates which we can apply to the time data from the 2011 survey. These give a total compliance cost of £63,304. It should however be noted that since the 2011 survey we have removed the requirement to report cattle data on the form, reducing the burden for approximately 7,200 holdings, but added information on tenancy for approximately 4,100 holdings<sup>15</sup>. Please refer to the December 2011 publication for how this figure was calculated and the range of times reported<sup>16</sup>.

#### 4.9 Other publications

The next large agricultural survey is the June census of agricultural holdings. This is a larger exercise which surveys around 33,000 holdings with results scheduled for publication in September 2015. Results for the 2015 December survey will be released in Spring 2016.

Results from all Scottish Government agricultural surveys can be accessed here:

[www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/Publications](http://www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/Publications)

Results from previous June Censuses can be accessed here:

[www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubFinalResultsJuneCensus](http://www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubFinalResultsJuneCensus)

Publications relating to cereal and oilseed rape production can be accessed here:

[www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubCerealHarvest](http://www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubCerealHarvest)

Agricultural Facts and Figures pocketbook. This provides a useful summary of the key statistics in the Scottish agriculture and food sector in a convenient pocketbook format.

[www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubFactsFigures](http://www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubFactsFigures)

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<sup>15</sup> Data from these holdings will be published in 'Tenanted Agricultural Land in Scotland, 2014/15' scheduled for release in April 2015.

<sup>16</sup> [www.gov.scot/Publications/2012/03/7513/4#a47](http://www.gov.scot/Publications/2012/03/7513/4#a47)

## 5. Tables

### AGRICULTURAL STATISTICS: RESULTS OF DECEMBER 2014 AGRICULTURAL SURVEY

Table 1 Crops and grass area, hay and silage production, 2004 to 2014

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	% Change between 2013 & 2014
<b>Crops and grass sown by 1 December (hectares) <sup>(1)</sup></b>												
Wheat	92,117	96,128	101,093	112,602	86,270	103,627	113,852	97,396	82,947	102,570	104,909	2.3%
Barley	57,503	57,171	56,305	60,182	52,034	53,174	50,929	49,222	56,977	56,411	55,085	-2.3%
Oats	5,288	6,700	7,045	7,401	6,242	7,593	7,146	6,459	6,957	8,272	7,753	-6.3%
Oilseed rape	35,583	35,496	38,376	32,810	28,536	33,737	37,622	35,304	35,146	36,328	36,447	0.3%
Total winter crops	190,491	195,495	202,817	212,995	173,081	198,132	209,550	188,382	182,027	203,581	204,194	0.3%
Grass sown <sup>(1)</sup>	52,007	58,701	57,098	46,440	40,812	57,761	58,586	47,060	45,576	60,329	54,119	-10.3%
<b>Grass cut (hectares)</b>												
For hay	45,481	53,405	56,562	44,770	40,783	41,029	44,851	45,351	32,768	52,238	52,531	0.6%
For silage / haylage	324,682	312,089	323,294	324,674	319,553	356,279	353,018	342,443	326,148	332,069	357,375	7.6%
									358,915	384,307	409,906	6.7%
<b>Production (tonnes) <sup>(2)</sup></b>												
Hay	284,797	329,512	382,515	287,661	239,107	265,490	297,440	279,225	193,084	311,055	363,689	16.9%
Grass silage / haylage	6,902,835	6,709,734	6,616,171	7,026,086	6,675,729	6,917,005	7,022,007	7,057,747	6,824,878	6,864,937	7,320,429	6.6%
Arable silage <sup>(2)</sup>	446,661	392,945	406,313	396,353	379,041	356,545	343,923	316,520	298,938	346,561	294,507	-15.0%
<b>Yields (tonnes/hectare)</b>												
Hay	6.3	6.2	6.8	6.4	5.9	6.5	6.6	6.2	5.9	6.0	6.9	16.3%
For silage / haylage	21.3	21.5	20.5	21.6	20.9	19.4	19.9	20.6	20.9	20.7	20.5	-0.9%

(1) Grass sown excludes minor holdings, which account for approximately 7% of total grassland

(2) Arable silage excludes minor holdings, which account for approximately 1.7% of crops

AGRICULTURAL STATISTICS: RESULTS OF DECEMBER 2014 AGRICULTURAL SURVEY

Table 2 Number of cattle, 2006 to 2014

	2006	2007	2008	2009	2010	2011	2012	2013	2014	% Change between 2013 & 2014
<b>Female Dairy Cattle</b>										
Aged 1-2	47,689	47,001	46,590	49,312	50,839	51,255	53,652	55,864	56,071	0.4%
Aged 2 years and over - with offspring	186,535	182,764	174,539	169,836	167,753	162,112	162,605	167,386	174,458	4.2%
Aged 2 years and over - without offspring	53,725	50,999	49,484	48,684	49,443	48,547	48,113	47,311	49,034	3.6%
<b>Total</b>	<b>287,949</b>	<b>280,764</b>	<b>270,613</b>	<b>267,832</b>	<b>268,035</b>	<b>261,914</b>	<b>264,370</b>	<b>270,561</b>	<b>279,563</b>	3.3%
<b>Female Beef Cattle</b>										
Aged 1-2	216,744	215,415	207,710	202,174	192,822	182,636	190,377	184,958	182,685	-1.2%
Aged 2 years and over - with offspring	477,076	471,440	448,508	451,634	459,701	449,607	431,422	428,504	422,923	-1.3%
Aged 2 years and over - without offspring	75,200	80,420	78,914	81,717	82,516	71,489	83,765	72,817	72,565	-0.3%
<b>Total</b>	<b>769,020</b>	<b>767,275</b>	<b>735,132</b>	<b>735,525</b>	<b>735,039</b>	<b>703,732</b>	<b>705,564</b>	<b>686,279</b>	<b>678,173</b>	-1.2%
<b>Male Cattle</b>										
Aged 1-2	219,964	212,637	209,026	205,268	197,404	188,584	189,788	190,483	182,149	-4.4%
Aged 2 years and over	53,751	55,787	53,457	56,525	53,873	47,579	49,502	54,183	55,894	3.2%
<b>Total</b>	<b>273,715</b>	<b>268,424</b>	<b>262,483</b>	<b>261,793</b>	<b>251,277</b>	<b>236,163</b>	<b>239,290</b>	<b>244,666</b>	<b>238,043</b>	-2.7%
<b>Calves</b>										
Female dairy cattle under 1	47,986	48,440	50,421	52,167	52,440	55,005	56,999	56,583	58,948	4.2%
Female beef cattle under 1	253,278	246,857	237,414	226,464	229,106	231,681	223,804	213,856	218,248	2.1%
Male cattle under 1	283,676	274,505	269,502	265,548	269,186	269,056	265,415	252,694	257,957	2.1%
<b>Total</b>	<b>584,940</b>	<b>569,802</b>	<b>557,337</b>	<b>544,179</b>	<b>550,732</b>	<b>555,742</b>	<b>546,218</b>	<b>523,133</b>	<b>535,153</b>	2.3%
<b>Total cattle</b>	<b>1,915,624</b>	<b>1,886,265</b>	<b>1,825,565</b>	<b>1,809,329</b>	<b>1,805,083</b>	<b>1,757,551</b>	<b>1,755,442</b>	<b>1,724,639</b>	<b>1,730,932</b>	0.4%

AGRICULTURAL STATISTICS: RESULTS OF DECEMBER 2014 AGRICULTURAL SURVEY

Table 3 Number of sheep, 2004 to 2014

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	% Change between 2013 & 2014
<b>Sheep 1 year old or over</b>												
Ewes kept for breeding	2,538,803	2,490,681	2,425,371	2,349,773	2,209,201	2,193,045	2,107,892	2,104,664	2,129,003	2,091,865	2,252,912	7.7%
Shearling ewes put to ram	825,274	776,803	729,460	737,996	729,164	687,856	723,511	686,346	718,478	704,597	677,622	-3.8%
Shearling ewes not put to ram	42,619	32,844	33,261	33,617	31,202	27,370	20,967	25,277	32,804	19,551	23,097	18.1%
Rams kept for service	97,870	96,509	93,528	93,006	88,416	85,475	86,402	84,361	85,741	85,388	84,874	-0.6%
Other sheep	152,412	128,231	129,272	134,448	118,672	97,685	109,142	101,333	117,575	137,661	100,913	-26.7%
<b>Total</b>	<b>3,656,978</b>	<b>3,525,069</b>	<b>3,410,892</b>	<b>3,348,840</b>	<b>3,176,655</b>	<b>3,091,431</b>	<b>3,047,914</b>	<b>3,001,981</b>	<b>3,083,601</b>	<b>3,039,062</b>	<b>3,139,418</b>	<b>3.3%</b>
<b>Sheep under 1 year old</b>												
Ewe lambs put to ram	96,784	91,796	92,884	94,821	77,286	100,538	101,481	109,357	91,496	85,670	108,599	26.8%
Ewe lambs for future breeding	663,264	647,685	626,886	647,100	611,665	601,862	602,632	594,585	619,179	589,817	597,107	1.2%
Ram lambs intended for service	35,157	32,691	30,946	31,601	30,960	30,709	31,781	30,651	31,855	30,317	33,235	9.6%
Other sheep and lambs	1,206,109	1,179,360	1,242,432	1,204,695	1,118,528	1,019,589	1,010,790	952,245	1,082,339	1,018,839	963,054	-5.5%
<b>Total</b>	<b>2,001,315</b>	<b>1,951,532</b>	<b>1,993,148</b>	<b>1,978,218</b>	<b>1,838,439</b>	<b>1,752,698</b>	<b>1,746,684</b>	<b>1,686,838</b>	<b>1,824,869</b>	<b>1,724,643</b>	<b>1,701,995</b>	<b>-1.3%</b>
<b>Total sheep</b>	<b>5,658,293</b>	<b>5,476,601</b>	<b>5,404,040</b>	<b>5,327,057</b>	<b>5,015,094</b>	<b>4,844,129</b>	<b>4,794,598</b>	<b>4,688,819</b>	<b>4,908,470</b>	<b>4,763,705</b>	<b>4,841,413</b>	<b>1.6%</b>

AGRICULTURAL STATISTICS: RESULTS OF DECEMBER 2014 AGRICULTURAL SURVEY

Table 4 Number of pigs, 2004 to 2014

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	% Change between 2013 & 2014
<b>Breeding herd</b>												
Sows in pig	33,674	32,241	31,597	27,923	23,476	23,001	27,048	22,378	17,874	18,408	21,172	15.0%
Gilts in pig	7,440	3,747	4,696	4,460	4,053	3,893	5,299	4,438	4,588	4,863	5,850	20.3%
Other sows for breeding	6,985	6,721	7,886	6,420	5,650	4,872	6,315	5,346	5,661	5,226	6,178	18.2%
<b>Total</b>	<b>48,099</b>	<b>42,708</b>	<b>44,179</b>	<b>38,804</b>	<b>33,179</b>	<b>31,766</b>	<b>38,662</b>	<b>32,162</b>	<b>28,123</b>	<b>28,497</b>	<b>33,200</b>	16.5%
Barren sows for fattening	887	498	693	1,032	517	526	540	603	731	569	408	-28.3%
Gilts 50kg and over, not in pig but expected to be used for breeding	5,742	6,030	4,474	4,117	4,114	4,227	5,112	5,063	5,149	5,906	5,503	-6.8%
Boars being used for service	1,691	1,330	1,393	1,360	1,194	1,248	1,524	1,307	1,150	1,201	1,018	-15.2%
<b>All other pigs</b>												
110kg liveweight and over	5,057	9,662	6,085	4,724	4,722	6,375	6,181	3,506	3,456	3,003	4,822	60.6%
80kg and under 110kg liveweight	78,771	76,962	61,551	64,038	50,746	69,803	66,895	61,656	52,283	42,217	47,680	12.9%
50kg and under 80kg liveweight	91,890	88,089	103,631	98,842	78,629	85,187	91,385	85,145	70,684	59,089	63,074	6.7%
20kg and under 50kg liveweight	120,029	128,983	119,267	109,592	102,615	99,926	100,134	96,019	83,623	78,442	72,988	-7.0%
Under 20kg liveweight	129,113	131,510	120,111	119,119	106,386	90,867	105,696	90,832	78,892	74,544	93,441	25.4%
<b>Total</b>	<b>424,860</b>	<b>435,205</b>	<b>410,645</b>	<b>396,316</b>	<b>343,098</b>	<b>352,158</b>	<b>370,291</b>	<b>337,158</b>	<b>288,938</b>	<b>257,295</b>	<b>282,005</b>	9.6%
<b>Total pigs</b>	<b>481,278</b>	<b>485,771</b>	<b>461,385</b>	<b>441,629</b>	<b>382,102</b>	<b>389,925</b>	<b>416,129</b>	<b>376,293</b>	<b>324,091</b>	<b>293,468</b>	<b>322,134</b>	9.8%

AGRICULTURAL STATISTICS: RESULTS OF DECEMBER 2014 AGRICULTURAL SURVEY

Table 5 Number of poultry, 2004 to 2014

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	% Change between 2013 & 2014
<b>Fowls for producing eggs for eating</b>												
Pullets & hens in the laying flock:												
- Hens in first laying season	2,826,482	3,094,851	3,099,396	3,187,669	3,021,831	3,083,474	3,819,339	3,952,681	3,813,267	3,571,694	4,455,178	24.7%
- Moulded hens	36,596	33,774	37,919	44,671	39,100	46,110	44,040	41,682	42,227	43,511	43,516	0.0%
Pullets being reared for laying	1,132,873	982,436	947,183	1,114,577	759,142	1,149,717	1,605,772	1,330,404	1,412,285	1,385,991	967,221	-30.2%
<b>Total</b>	<b>3,995,951</b>	<b>4,111,061</b>	<b>4,084,497</b>	<b>4,346,917</b>	<b>3,820,073</b>	<b>4,279,301</b>	<b>5,469,151</b>	<b>5,324,767</b>	<b>5,267,779</b>	<b>5,001,196</b>	<b>5,465,915</b>	<b>9.3%</b>
<b>Fowls for breeding</b>												
Breeding hens	1,273,365	1,342,977	1,737,734	1,154,501	1,165,922	1,026,827	924,492	1,263,033	878,033	1,215,233	937,916	-22.8%
Cocks	44,701	112,143	107,633	109,842	123,630	108,861	101,351	143,496	94,324	136,513	123,376	-9.6%
<b>Total</b>	<b>1,318,066</b>	<b>1,455,120</b>	<b>1,845,367</b>	<b>1,264,343</b>	<b>1,289,552</b>	<b>1,135,688</b>	<b>1,025,843</b>	<b>1,406,529</b>	<b>972,357</b>	<b>1,351,746</b>	<b>1,061,292</b>	<b>-21.5%</b>
<b>Broilers and other table birds</b>	<b>9,146,411</b>	<b>9,106,598</b>	<b>7,210,040</b>	<b>8,139,412</b>	<b>8,027,373</b>	<b>7,698,459</b>	<b>8,146,495</b>	<b>7,483,899</b>	<b>8,725,482</b>	<b>7,740,664</b>	<b>5,295,250</b>	<b>-31.6%</b>
<b>Other Poultry (e.g. turkeys, ducks, geese)</b>	<b>23,757</b>	<b>24,862</b>	<b>70,157</b>	<b>34,541</b>	<b>46,931</b>	<b>58,168</b>	<b>57,192</b>	<b>72,450</b>	<b>92,020</b>	<b>93,773</b>	<b>88,474</b>	<b>-5.7%</b>
<b>Total poultry</b>	<b>14,484,185</b>	<b>14,697,641</b>	<b>13,210,060</b>	<b>13,785,214</b>	<b>13,183,929</b>	<b>13,171,616</b>	<b>14,698,681</b>	<b>14,287,645</b>	<b>15,057,638</b>	<b>14,187,379</b>	<b>11,910,931</b>	<b>-16.0%</b>

AGRICULTURAL STATISTICS: RESULTS OF DECEMBER 2014 AGRICULTURAL SURVEY

Table 6 Number of tractors and other transport on main holdings, December 2004 to 2014 <sup>(1) (2)</sup>

	2004	2005	2006	2007 <sup>(2)</sup>	2008	2009	2010	2011	2012	2013	2014	% Change between 2013 & 2014
	<i>number</i>	<i>number</i>	<i>number</i>	<i>number</i>	<i>number</i>	<i>number</i>	<i>number</i>	<i>number</i>	<i>number</i>	<i>number</i>	<i>number</i>	
<b>Tracklaying tractors (Caterpillars)</b>	<b>251</b>	<b>315</b>	<b>379</b>	<b>465</b>	<b>759</b>	<b>654</b>	<b>803</b>	<b>604</b>	<b>579</b>	<b>706</b>	<b>561</b>	<b>-20.5%</b>
<b>Wheeled tractors:</b>												
under 35 hp	2,949	2,834	2,994	2,313	2,415	2,230	2,442	2,102	2,258	2,179	2,277	4.5%
35 to under 55 hp	7,675	7,510	7,112	7,044	6,813	6,847	6,789	6,145	6,371	6,129	5,799	-5.4%
55 to under 80 hp	11,951	10,921	10,478	10,237	10,000	9,160	8,852	8,125	7,580	7,323	7,060	-3.6%
80 to under 108 hp	14,258	13,876	13,997	13,325	13,202	13,229	12,935	12,154	12,120	11,569	11,158	-3.6%
108 to under 134 hp	4,901	5,130	5,560	5,753	5,986	6,287	6,585	6,694	6,873	6,817	7,192	5.5%
134 hp and over	2,140	2,343	2,686	3,313	3,757	4,244	4,587	5,004	5,481	5,991	6,276	4.8%
<b>Total wheeled tractors</b>	<b>43,874</b>	<b>42,614</b>	<b>42,827</b>	<b>41,985</b>	<b>42,173</b>	<b>41,997</b>	<b>42,190</b>	<b>40,224</b>	<b>40,683</b>	<b>40,008</b>	<b>39,762</b>	<b>-0.6%</b>
of which:												
tractors under 10 hp	202	284	306	:	:	:	:	:	:	:	:	:
tractors 201 hp and over	:	:	:	236	280	435	461	539	684	812	896	10.3%
4-Wheel drive tractors	21,595	22,151	22,941	22,660	26,091	26,661	27,557	25,895	26,438	26,374	26,792	1.6%
<b>Other transport (even years)<sup>(3)</sup></b>												
Lorries, vans and pick-ups:												
Up to 2 tonnes capacity	7,820	:	9,206	:	9,000	:	9,190	:	9,110	:	6,087	-33.2%
2 tonnes capacity and over	1,815	:	1,793	:	2,002	:	2,281	:	2,483	:	2,056	-17.2%
All-terrain vehicles:												
3 and 4 wheeled motorcycles	9,307	:	10,053	:	10,316	:	10,973	:	11,427	:	10,846	-5.1%
8 wheeler and other types	336	:	457	:	440	:	523	:	782	:	638	-18.4%
Land rover or similar 4-wheel drive vehicles for farm use	:	:	:	:	:	:	:	:	:	:	8,060	z
<b>Total</b>	<b>19,278</b>	:	<b>21,509</b>	:	<b>21,758</b>	:	<b>22,967</b>	:	<b>23,802</b>	:	<b>27,687</b>	16.3%
<b>Other transport (odd years)<sup>(3)</sup></b>												
Lorries, vans and pick-ups:												
Up to 2 tonnes capacity	:	3,640	:	3,925	:	3,992	:	4,557	:	4,283	:	-6.0%
2 tonnes capacity and over	:	1,269	:	1,430	:	1,587	:	1,600	:	1,925	:	20.3%
All-terrain vehicles:												
3 and 4 wheeled motorcycles	:	8,214	:	8,839	:	9,266	:	9,891	:	9,825	:	-0.7%
8 wheeler and other types	:	262	:	392	:	499	:	527	:	709	:	34.5%
Land rover or similar 4-wheel drive vehicles for farm use	:	7,517	:	7,635	:	7,902	:	7,703	:	7,454	:	-3.2%
<b>Total</b>	:	<b>20,902</b>	:	<b>22,221</b>	:	<b>23,246</b>	:	<b>24,278</b>	:	<b>24,196</b>	:	-0.3%

: Information not available

z Not applicable

(1) Minor holdings are excluded from these results

(2) As of 2007 we have changed the groups used to collect tractor power information. There is now a separate category for tractors of 201 hp and over, and the "under 10 hp" and "10 to under 35 hp" groups have been combined.

(3) The items under the 'Other transport' heading are asked in separate sections of the form between odd and even years. In even years, the questions are located in the 'Miscellaneous' section of the form, while in odd years, they are located within the 'Load handling and transport' section. As such, data between odd and even years are not directly comparable.

(4) Data on land rovers or similar 4-wheel drive vehicles was requested in 2014, the first time this question was asked in an even year. Because of the differences in how lorries, landrovers, and all-terrain vehicles have been collected over the years, comparisons should be treated with caution. In previous even years some landrovers may have been included in the "lorries, vans and pick-ups" category.

See section 3.8 of the publication for more information.

AGRICULTURAL STATISTICS: RESULTS OF DECEMBER 2013 AGRICULTURAL SURVEY

Table 7 Machinery for information collected on odd years of the December survey 2003 to 2013 <sup>(1)</sup>

	2003	2005	2007	2009	2011	2013	Percentage change between 2011 & 2013
<b>Load handling:</b>							
<b>Wheeled automatic bale accumulators and packers</b>	<i>number</i>	<i>number</i>	<i>number</i>	<i>number</i>	<i>number</i>	<i>number</i>	
Linkage and loader attachment:							
Big bales	1,542	1,546	1,491	1,273	1,130	864	-23.5%
Conventional bales	10,611	11,145	10,895	11,323	12,189	10,648	-12.6%
<b>Fork lift trucks:</b>							
Rough terrain type	3,200	2,968	2,636	2,473	2,723	2,523	-7.3%
Factory type	1,379	1,291	1,309	1,188	1,070	1,092	2.1%
Telescopic	1,107	1,165	1,200	1,232	1,244	1,175	-5.5%
<b>General purpose tractor trailers:</b>							
Under 6 tonnes capacity	3,619	3,888	4,299	4,835	5,084	5,398	6.2%
6 to 12 tonnes capacity	16,150	14,808	13,594	12,507	11,214	10,349	-7.7%
12 tonnes capacity and over	12,944	12,920	13,093	13,418	13,351	13,825	3.6%
<b>Miscellaneous:</b>							
Mounted hedge cutters	1,727	1,894	2,254	2,717	3,220	3,531	9.7%
Cattle weighing crushes	767	1,192	833	843	910	1,077	18.4%
<b>Cultivation:</b>							
<b>Power take off driven:</b>							
Harrows	2,607	2,604	2,442	2,315	2,491	2,331	-6.4%
Rotary diggers and cultivators	4,081	4,318	4,166	4,432	4,380	4,389	0.2%
<b>Disc harrows:</b>							
Mounted and semi-mounted	2,577	2,393	2,058	2,081	1,923	1,720	-10.6%
Trailed	3,600	3,099	2,936	2,911	2,689	2,359	-12.3%
<b>Other cultivators, harrows and hoes:</b>							
Mounted	2,061	1,655	1,879	1,483	1,386	1,303	-6.0%
Trailed	9,604	9,363	9,053	8,786	8,626	8,220	-4.7%
<b>Stone separators</b>	3,686	3,227	2,947	2,956	2,461	2,448	-0.5%
<b>Sowing:</b>							
<b>Direct drills:</b>							
Root and vegetable seeds	732	637	673	604	615	610	-0.8%
<b>Grain drills:</b>							
Seed only	2,059	1,953	1,589	1,496	1,343	1,281	-4.6%
Combined seed and fertiliser	2,667	2,690	2,634	2,833	2,704	2,548	-5.8%
<b>Seedling transplanters</b>	2,781	2,483	2,122	2,137	1,955	1,815	-7.2%
<b>Potato planters</b>	227	210	192	140	191	183	-4.2%
<b>Harvesting:</b>							
Mower conditioners	1,510	1,392	1,318	1,197	1,193	926	-22.4%
<b>Mowers:</b>							
Cutter bar types	3,450	3,725	3,915	4,186	4,278	3,517	-17.8%
Drum disc and flail types	1,686	1,460	1,295	1,091	1,174	1,145	-2.5%
<b>Tedders, turners and siderakes</b>	7,108	6,458	6,113	5,764	5,408	5,743	6.2%
<b>Buckrakes</b>	12,131	11,669	11,469	11,265	11,308	10,389	-8.1%
<b>Potato harvesters:</b>							
Spinners, elevator and shaker diggers	5,717	5,320	4,957	4,550	4,114	3,491	-15.1%
Complete harvesters	1,741	1,408	1,385	1,019	1,055	860	-18.5%
<b>Potato graders</b>	833	715	689	700	679	663	-2.4%
	818	864	757	666	644	570	-11.5%

(1) Minor holdings are excluded from these results



AGRICULTURAL STATISTICS: RESULTS OF DECEMBER 2014 SURVEY OF MAIN HOLDINGS

Table 8 Machinery for information collected on even years of the December survey 2004 to 2014 <sup>(1)</sup>

							Percentage
	2004	2006	2008	2010	2012	2014	change between 2012 & 2014
<b>Drying and storage</b>	<i>number</i>	<i>number</i>	<i>number</i>	<i>number</i>	<i>number</i>	<i>number</i>	
<b>Grain driers (complete installations):</b>							
Continuous flow (including mobile driers)	1,098	1,071	936	928	894	855	-4.4%
Batch (including mobile driers)	1,958	1,928	1,960	1,840	1,953	1,869	-4.3%
On floor or in bins	1,838	1,467	1,442	1,330	1,086	969	-10.8%
Mobile engine-driven fan	358	327	346	267	209	189	-9.6%
<b>Miscellaneous:</b>							
Feed mills, feed mixers and combined mill/mixers	3,757	3,515	3,200	3,192	3,023	2,767	-8.5%
Field crop or fruit sprayers (mounted or trailed)	4,750	4,568	4,228	4,293	4,431	3,841	-13.3%
Drainage and ditching equipment (mounted or self propelled)	3,700	3,697	3,556	3,794	3,723	3,580	-3.8%
Stand-by generators	4,725	5,247	5,371	5,436	5,160	4,993	-3.2%
General purpose elevators (for bales, sacks, etc)	2,297	1,861	1,544	1,332	1,125	919	-18.3%
Moveable augers and pneumatic conveyors	7,091	6,531	5,741	5,285	5,032	4,053	-19.5%
<b>Cultivation:</b>							
Tractor ploughs:							
Reversible	8,091	7,745	7,474	7,506	7,680	7,234	-5.8%
Non-reversible	4,627	4,200	3,445	3,350	3,201	3,002	-6.2%
Ridging	3,778	3,316	2,741	2,818	2,649	2,137	-19.3%
Rollers (complete sets)	12,068	11,200	10,665	10,373	9,911	9,475	-4.4%
<b>Planting and fertilizer dist</b>							
Mechanical dung spreaders	8,023	7,370	6,893	6,660	6,314	5,958	-5.6%
Slurry and effluent tankers	4,148	4,209	4,092	4,077	4,195	3,867	-7.8%
<b>Fertilizer distributors:</b>							
Solid	12,173	12,083	10,898	10,948	10,487	9,979	-4.8%
Liquid or gaseous	216	200	229	188	188	201	6.9%
<b>Harvesting:</b>							
<b>Forage harvesting:</b>							
Single chop	356	341	287	278	264	267	1.1%
Double chop	424	331	309	296	205	184	-10.2%
Metered chop	1,448	1,304	1,168	1,074	985	855	-13.2%
Pick-up forage wagons	174	170	185	196	187	246	31.6%
<b>Combine harvesters:</b>							
Under 12 feet (3.66 metres) cut	1,027	982	880	748	633	541	-14.5%
12 feet (3.66 metres) and under 16 feet (4.88 metres) cut	2,452	2,110	1,895	1,715	1,590	1,369	-13.9%
16 feet (4.88 metres) cut and over	1,409	1,425	1,583	1,690	1,987	1,974	-0.7%
<b>Balers:</b>							
To make bales: under 2 hundredweights (100 kilogrammes)	4,555	4,099	3,624	3,544	3,077	2,690	-12.6%
over 2 hundredweights (100 kilogrammes)	6,646	5,708	5,352	5,404	5,307	5,232	-1.4%
Bale wrappers	2,536	2,561	2,739	2,752	2,970	3,032	2.1%
Turnip and forage root harvesters	1,358	1,285	1,094	1,080	884	720	-18.6%

(1) Minor holdings are excluded from these results

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ISBN 978-1-78544-215-5

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