



AGRICULTURE, ENVIRONMENT AND MARINE

Results from the June 2016 Scottish Agricultural Census

25th October 2016

1. Main Findings

The results show that, compared with June 2016:-

Cereal area decreased by 11,500 hectares (three per cent) to 432,000 hectares. This was driven by a fall in the area of spring barley (down 17,000 hectares or seven per cent. (Table 1a)

The area of **oilseed rape** decreased by 5,100 hectares (14.5 per cent) to 31,000 hectares. Oilseed is mainly winterplanted, with the area of spring oilseed rape now being the lowest since current records began in 1984. (Table 1a)

The area grown with **potatoes** increased by 1,800 hectares (seven per cent) to 27,500 hectares, the first rise since 2009. Areas of both ware and seed potatoes rose (eight and five per cent respectively). (Table 1b)

Crops for stockfeed decreased eight per cent. The area of **fruit** increased by 57 hectares (three per cent), while there was a nine per cent increase in the area of **vegetables** for human consumption. (Tables 1b, 2b)

The area of **fallow land** increased by 30 per cent to 43,000 hectares, as farmers continued to adapt to crop diversification requirements. (Table 1c)

Barley

▶17,000 ha

Wheat

7 30 ha

Oats

↑ 5,600 ha

Oilseed rape

♦ 5,100 ha

Potatoes

↑ 1,800 ha

Fruit

↑ 57 ha

Stockfeed

↓ 1,400 ha

Veg

↑ 1,500 ha

Fallow

↑ 10,000 ha

The total number of **cattle** dropped, marginally, by 1,800 (0.1 per cent) to 1.80 million. However, there has been a longer-term decline in numbers since 1974. The number of female dairy cattle fell by 1,600 (0.6 per cent) to 276,000, while the number of beef cattle rose by 1,500 (0.2 per cent) to 711,000. (Table 3)

Cattle **1**,800

The total number of **sheep** rose by 125,000 (two per cent) to 6.83 million, with a rise in numbers for all categories. Breeding ewe numbers rose by 30,000 (1.2 per cent) while other sheep for breeding went up, slightly, by 1,800 (0.2 per cent). Lamb numbers rose by 90,000 (three per cent). (Table 4)

Sheep ↑ 125,000

The total number of **pigs** rose by 12,500 (four per cent) to 330,000, the third annual rise in a row. This rise was driven by a rise in the number of fattening pigs, which rose by 15,000 (five per cent). The breeding herd rose only slightly, by 124 (0.4 per cent) over the period. (Table 5)

Pigs ↑ 12,500

The **poultry** flock increased by 1.06 million (eight per cent) to 14.11 million. This was largely driven by an increase in the number of broilers (up 840,000 or 15 per cent) but also by an increase in the laying flock of 216,000 (3.5 per cent). (Table 6)

Poultry

↑ 1.06 million

The headcount number of **people working** in agriculture was 63,400, a drop of 1,900 (3 per cent). (Table 8b)

The amount of agricultural land that was **rented** for one year fell, marginally, by 180 hectares to remain around 1.32 million hectares, constituting 23 per cent of agricultural land. (Table 9)

Rented land

180 ha

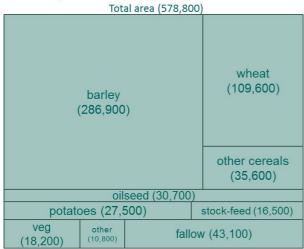
There has been a slight decrease of 22 holdings (0.3 per cent) in the estimated number of holdings with tenancy agreements (excluding crofts), to 6,600. (Tables 10 and 11)

Tenanted holdings

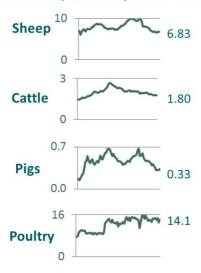
(diagonal arrows indicate changes of less than one per cent)

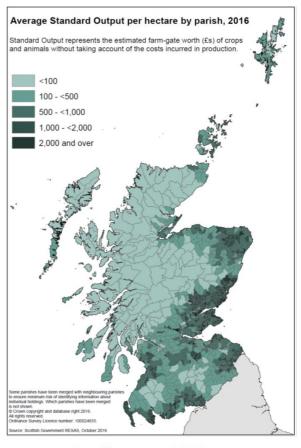
Farm-types 2016 holdings area SO per holding Cereal 2,494 257,800 77,100 Gen crop 1,738 254,700 192,200 Horticulture 21,000 323,500 720 **Pigs** 236 10,600 179,400 **Poultry** 11,700 201,600 852 401,700 Dairy 768 113,500 45,000 **S&C LFA** 14,517 3,151,600 S&C nLFA 120,800 48,900 2,475 Mixed 5,225 284,200 53,700 **Forage** 21,313 1,368,100 3,200 Other 1,556 58,200 **Total** 51,896 5,652,200 45,500

Crop areas (hectares) - June 2015

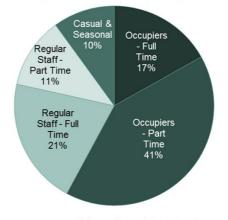


Livestock (millions) 1946-2016





Employment 2016 (headcount 63,400)



Rented land 1983-2016



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2. Introduction

This publication contains results from the 2016 June Agricultural Census on land use, crop areas, livestock and the number of people working on agricultural holdings.

Census statistics are used by government and stakeholders to assess agricultural activity by different sectors of the industry and to inform related debate and policies. They also form the basis of a large amount of further analytical work, such as that carried out to determine the details of Common Agricultural Policy (CAP) reform. The government also uses these results to meet the requirements of Statistical Regulations of the European Commission.

Much of the crop and land use data used in the Census is taken from the Rural Payments and Services Single Application Form. Some elements of this year's data have been affected by recent changes to the system. Please see section 4.7 for further details.

This Statistical Publication provides commentary and graphics on the latest annual changes and trends over the past ten years. It is available at www.gov.scot/stats/bulletins/01250

Accompanying this release is an annex containing the <u>Abstract of Scottish</u> <u>Agricultural Statistics</u>¹, which presents trends going back to 1982.

We are happy to receive comments on the content or format of this publication at: email: agric.stats@gov.scot

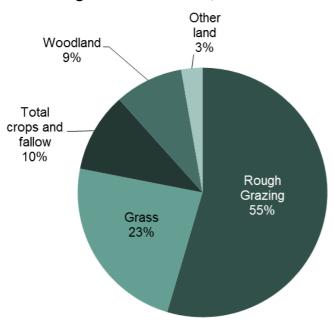
Contact: **Graeme Kerr** Tel: **0300 244 9709**

¹ www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubAbstract/AbstractPub

3. Commentary

3.1 Agricultural Area

Chart 1: Agricultural land use, June 2016

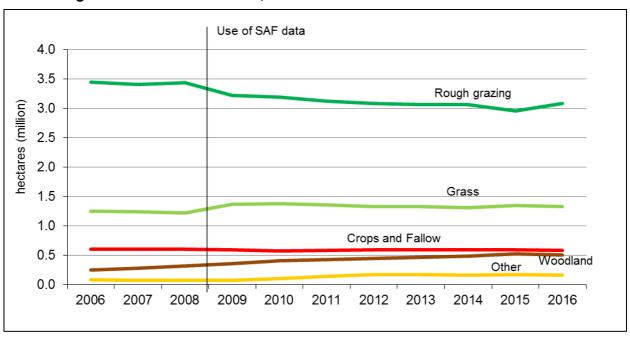


The total area on agricultural holdings at June 2016 was 5.65 million hectares, with the majority of this area being rough grazing (55 per cent). Almost a quarter (23 per cent) was grass, with 10 per cent used for crops or left fallow. The remainder consisted of woodland (nine per cent) and 'other land' (three per cent) comprised of roads, yards, buildings, scree, ponds and other such non-cultivated land.

There were 51,896 agricultural holdings, with the total area equating to 73 per cent of Scotland's total land area.

There was also a further 584,225 hectares of common grazing not included in these census results. If common grazing is included, the total area was 6.24 million hectares, which equates to 80 per cent of Scotland's total land area.

Chart 2: Agricultural land use trends, 2006 to 2016



Over the past ten years, the total area on agricultural holdings has varied between 5.58 and 5.65 million hectares. This variation is likely to reflect changes to the coverage of agricultural holdings included in the June Census register, as well as genuine changes in total agricultural land.

For the first time since 2008 there was an increase in the area of rough grazing, rising 135,000 hectares (4.6 per cent). This change, however, may in part be due to changes in the Single Application Form² (SAF) rather than representing a genuine increase. It is notable, for instance, that this rise has occurred in tandem with a drop in the area of woodland (by 22,000 hectares or 4.1 per cent), the first since 2005.

However, the general trend in relation to the area of woodland reported on agricultural holdings, shows that it has more than doubled over the past ten years. This may be partly due to increased coverage of this type of land by the June Census register, particularly in the years immediately following the use of SAF data from 2009, but consistent increases in woodland over the last decade suggest genuine increase is also driving the trend.

Overall, the area of grass fell (by 13,000 hectares or 1.2 per cent). In 2015, a change in how temporary grass was defined was accompanied by a shift from grass under five years old to grass five years and over. This year, the ratio of permanent grass to temporary grass has been largely maintained, with both categories falling broadly in proportion (temporary grass down 1.4 per cent and permanent grass down 0.9 per cent).

3.2 Crops, fallow and set-aside land

In 2016, there were 582,000 hectares of crops and fallow land, with cereals accounting for the majority (74 per cent or 432,000 hectares). Oilseeds made up 5.3 per cent and vegetables (including potatoes) 7.8 per cent. The remaining 13 per cent was comprised mainly of stock-feeding crops, fruit and fallow land.

Chart 3 displays trends in these categories over the past ten years (including setaside land up to 2008).

In terms of the last ten years, cereal areas were at their lowest in 2006 and 2007, but increased by 53,000 hectares (13 per cent) in 2008 in response to tight EU and world supply, high market prices following the 2007 harvest and the ending of compulsory set-aside. There were decreases in cereal areas in the years 2009 and 2010 as market prices dropped and the supply situation eased. Following a rising trend in subsequent years, cereals areas have, since 2015, stood around 2009/10 levels.

² See section 4.7

700,000
600,000
500,000
400,000
200,000
100,000
2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

Chart 3: Trends in crops and fallow 2006 to 2016

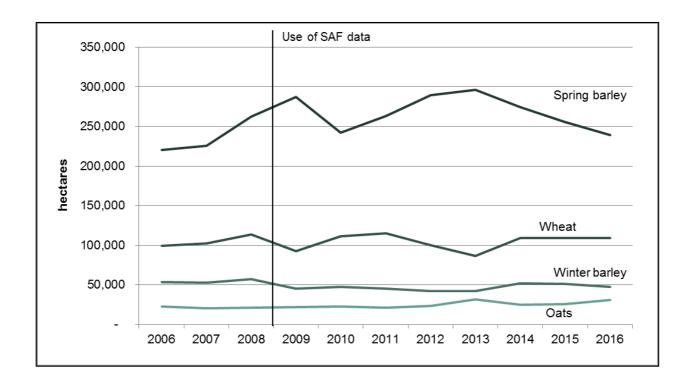
3.3 Cereals

In June 2016, the total area of cereal crops was 432,000 hectares, down 12,400 hectares (2.8 per cent).

As usual, spring barley was the dominant cereal crop accounting for 239,000 hectares (55 per cent) of the total cereal area in June 2016, with winter barley adding a further 48,000 hectares (11 per cent of the total cereal crop area). Wheat accounted for 110,000 hectares (25 per cent of the total cereal crop area). Spring oats predominated over the winter variety with 23,000 hectares (5.4 per cent of the total cereal crop area), compared with 8,100 hectares (1.9 per cent of the total) of winter oats.

There were 3,700 hectares of rye in Scotland in 2016, a nine-fold increase from the 400 hectares recorded in 2014. This is the first time this crop (which can be used in anaerobic digestion plants) has featured in this publication, though the area is comprised only of data from holdings submitting a SAF. Holdings from SAF data constitute 90% of the agricultural land area in Scotland.

In 2015, change were made to the EU Common Agricultural Policy (CAP) support schemes. This included changes to the criteria for accessing the Basic Payment Scheme (BPS) - previously called Single Farm Payments (SFP). In particular, there was a requirement for crop diversification. Though this is the second set of results since these have been introduced, it may be that changes in land use this year reflect continuing efforts being made to adhere to the requirements. In particular, the decline in cereals was accompanied by a rise in the areas of fallow land and oats, however the fall in the area of barley may also be partly linked to low prices and wet weather during the spring planting season.



Compared to 2015, the area of spring barley decreased by 17,000 hectares (6.6 per cent) to 239,000 hectares. Winter barley decreased by 3,800 hectares (7.3 per cent). The area of wheat was largely unchanged, increasing by only 31 hectares. Spring oats increased by 5,100 hectares (28 per cent). Winter oats increased by 500 hectares (6.7 per cent) to 8,100 hectares, the highest figure since this crop was recorded separately (1995).

The trends between June 2015 and June 2016 demonstrate:

- A decrease in spring barley of 17,000 hectares (6.6 per cent) to 239,000 hectares.
- A decrease in the total area of barley of 21,000 hectares (6.7 per cent) to 287,000
- The area of wheat has remained at around 110,000 hectares.
- An increase in oats of 5,600 hectares (21.8 per cent) to 31,000 hectares.

More information

Statistics on crop yield and production for cereals and oilseed rape are available from Scottish Harvest Publications³. First estimates of the 2016 cereal and oilseed rape harvests were published on 6th October 2016.

 $^{^3\} www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubCerealHarvest$

3.4 Oilseed rape

Over the past ten years, the total area of oilseed rape has fluctuated between 29,000 and 39,000 hectares. Figures for June 2016 show a fall of 5,200 hectares on the previous year to 31,000 hectares. Winter oilseed rape decreased by 5,100 hectares (14 per cent), while the combined area of spring oilseed rape and linseed⁴ (which has settled below 1000 hectares since 2014) fell back by 160 hectares to 590 hectares, the lowest figure recorded since collection started in 1988.

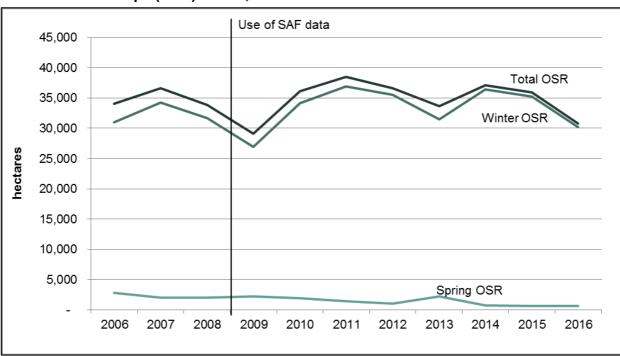


Chart 5: Oilseed rape (OSR) trends, 2006 to 2016

⁴ In order to prevent disclosure, the small amount of linseed is included with spring oilseed rape figures

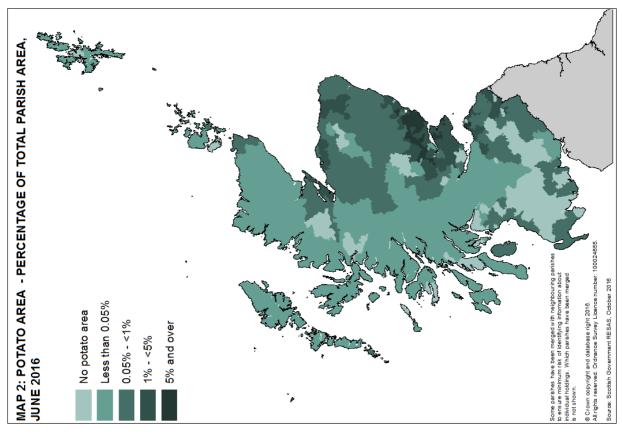
3.5 Potatoes

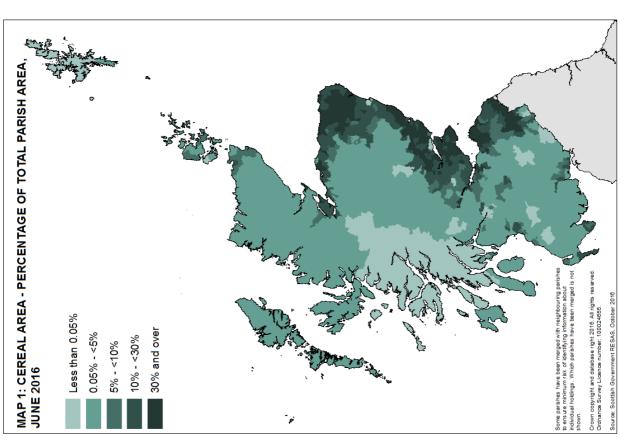
The area of potatoes sown rose for the first time since 2009, when SAF data began being used, with high prices evident. The area of both ware and seed potatoes rose, with the former increasing by 1,100 hectares (8.2 per cent) and the latter by 650 hectares (5.3 per cent).

Use of SAF data 35,000 Total potatoes 30,000 25,000 hectares 20,000 Ware potatoes 15,000 Seed potatoes 10,000 5,000 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

Chart 6: Potato trends, 2006 to 2016

Maps 1 and 2 show the percentage of the total area in a parish (not just of the area of agricultural holdings) that was used for growing cereals and potatoes. Where there are too few producers in an area the data are deemed disclosive and so are grouped with a neighbouring area or areas. The overall pattern is not considered to be greatly affected by this suppression.





3.6 Peas & beans for combining

The peas and beans described here are usually harvested by combine harvester (hence the name) and used as a source of protein in animal feed. Chart 7 demonstrates that there has been considerable fluctuation in the area of beans. The 2016 figure, for example, fell by 1,000 hectares (26 per cent) following a rise of similar magnitude the previous year. Similarly, the area of peas for combining fell by 700 hectares (47 per cent) after more than doubling in 2015.

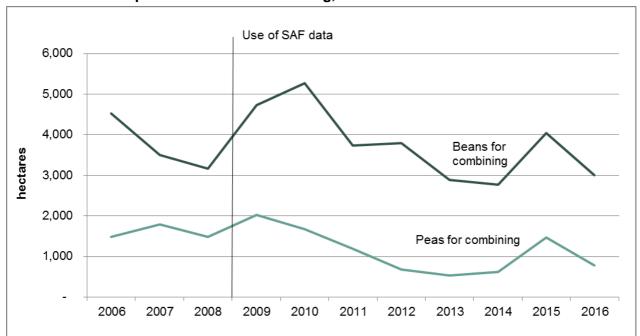


Chart 7: Trends in peas & beans for combining, 2006 to 2016

3.7 Crops for stockfeeding

The total area of stockfeeding crops declined markedly between 2006 and 2008, which coincided with a greater rate of decline in cattle and sheep numbers. The area remained fairly stable between 2008 and 2010 but declined in 2011 by 3,000 hectares (13 per cent), possibly due to farmers responding to higher prices in cereals and switching crops. In June 2016 the area fell by 1,400 hectares (7.8 per cent) to 16,500. Change amongst the individual crops in this group was modest, with the exception of maize (where the area was almost halved to 760 hectares), rape (down 16 per cent to 2,000 hectares) and other stockfeeding crops (down five per cent to 7,100 hectares).

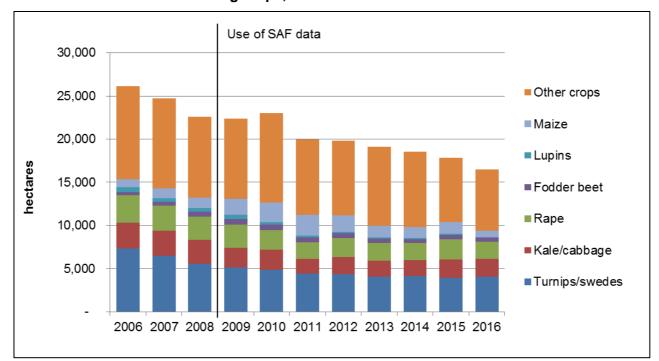
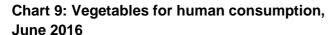
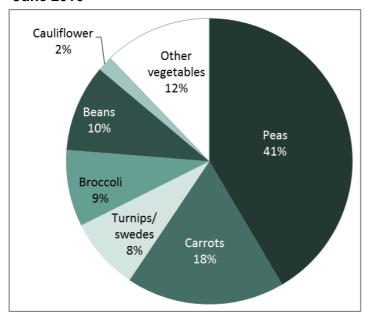


Chart 8: Trends in stockfeeding crops, 2006 to 2016

3.8 Vegetables for human consumption





The total area of vegetables grown in the open for human consumption at June 2016 increased by 1,500 hectares (nine per cent) to 18,200 hectares, the largest rise (both in terms of percentage and area) since SAF applications began to be used as the primary source of land data in 2009. As has been the case over the last ten years, peas were the dominant vegetable accounting for 42 per cent of the total vegetable area, followed by carrots (18 per cent), beans (ten per cent), broccoli (calabrese) (nine per cent), turnips/swedes (eight per cent), with all other vegetable crops contributing 12 per cent.

Trends show that the total vegetable area increased by 1,700 hectares (16 per cent) between 2003 and 2008, mostly due to increases in peas and carrots.

The increase in vegetables from 2015 to 2016 was driven by increases in all crops, though peas (up 510 hectares or seven per cent), carrots (up 380 hectares or

13 per cent) and beans (up 320 hectares or 22 per cent) accounted for the largest increases.

The area of vegetables planted, which is often related to demand and contracts with supermarkets, has almost doubled since 1988. The increase in the area of vegetables of 3,700 hectares (31 per cent) between 2008 and 2009 however, probably represents a jump in the data series following the switch to using SAF data for those holdings claiming Single Farm Payment.

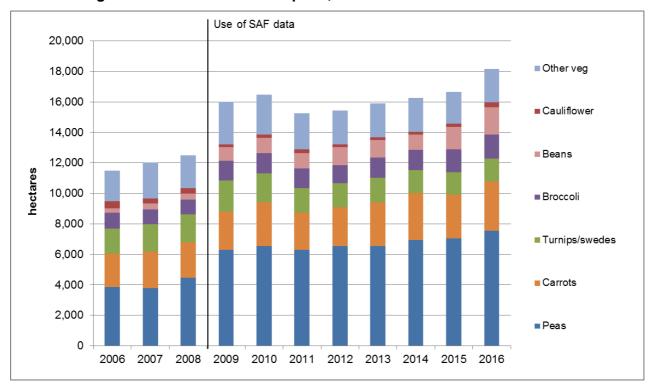


Chart 10: Vegetables for human consumption, trends 2006 to 2016

3.9 Fruit

In 2012, the SAF was amended to collect more detailed information on soft fruit, particularly with regard to identifying whether crops were grown in open fields, glasshouses or walk-in plastic structures. This resulted in a large shift from those areas reported as open field towards those classed as grown under walk-in plastic structures or glasshouses.

Chart 11 presents combined areas of soft fruit in both open field, in walk-in plastic structures and glasshouses. Given the developments in data collection described above, the changes seen in 2009 and 2012 should be treated with some caution.

Between 2015 and 2016 the area of strawberries grown rose by 54 hectares to 990 hectares (a 5.7 per cent increase), largely driven by an increase in crops grown under cover.

Raspberries which, in recent years have been affected by reduced demand and disease such as raspberry root rot, resumed the declining trend evident since 2009

(following an increase in 2015), falling by 25 hectares (seven per cent) to 325 hectares. The area of blackcurrants also fell by 12 hectares (four per cent) to 300 hectares.

In contrast, alternative soft fruits such as blueberries and those encompassed within the 'other fruit' category both increased, by 12 hectares (ten per cent) and by 40 hectares (50 per cent) respectively. Orchard fruit fell 11 per cent to 98 hectares.

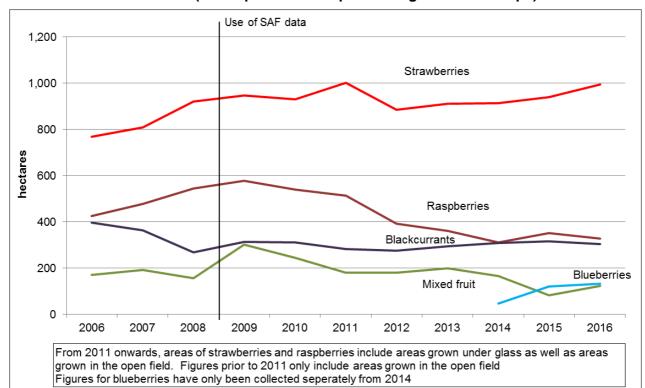


Chart 11: Soft fruit trends (both open field and plastic or glasshouse crops) 2006 to 2016

3.10 Bulbs, flowers & hardy nursery stock

In 2015, there was a drop of 330 hectares (26 per cent) in the area of land used to grow bulbs, flowers and nursery stock. This fall was driven by a drop in the recorded area of ornamental trees, which may have been due to changes in the categories used on the 2015 SAF rather than a genuine reduction of ornamental trees or hardy nursery stock. The crop area was, however, maintained in 2016, with only a slight reduction (of just under five hectares or 0.5 per cent) evident in the area of bulbs, flowers and hardy nursery stock.

3.11 Livestock trends summary

Chart 12 presents livestock trends as indices. This demonstrates the relative change of each livestock category from a baseline year of 2006 and can be used to compare trends across livestock types with quite different population totals. Decreases in livestock are evident for all categories across the ten year period, except for poultry. The largest decrease occurred among pigs (29 per cent). Smaller decreases are evident among sheep (11 per cent) and cattle (10 per cent), while poultry rose slightly (by four per cent).

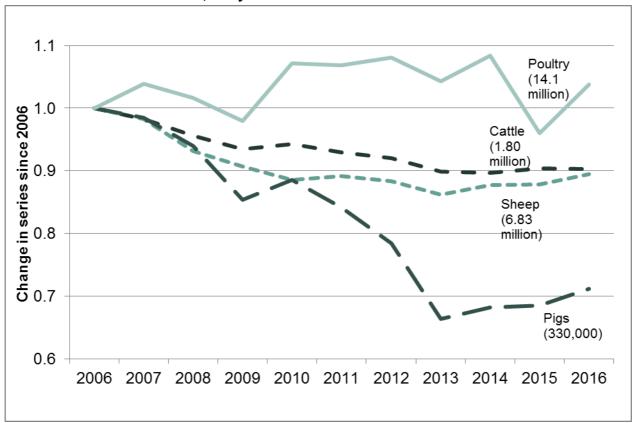


Chart 12: Livestock indices, ten-year trends relative to 2006

Cattle Tracing Scheme (CTS) data are derived from an administrative data source which records cattle movements across Great Britain and which replaced the collection of cattle data via the census in 2013. CTS data from 2006 onwards have been used in this publication.

In 2005 the Single Farm Payment (SFP) scheme was introduced, which decoupled subsidy payments from most sheep and cattle production, with the exception of the Scottish Beef Calf Scheme. With the introduction of SFP, the decline in sheep numbers accelerated, with a decrease of 11 per cent between 2006 and 2010, although the population has stabilised in the last few years, including increases in 2011 (0.7 per cent), 2014 (1.9 per cent), 2015 (0.1 per cent) and 2016 (1.9 per cent). Cattle numbers have also been in decline, down by 9.7 per cent between 2006 and 2015, though with a small increase in 2015.

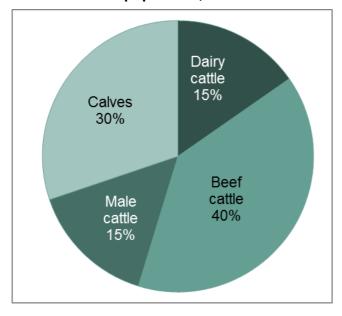
Notwithstanding a rise in 2010, pig numbers fell steadily between 2005 and 2013. The rise in pig numbers in 2010 (owing to strong pig prices and an increase in the breeding herd), interrupted falls of 16 per cent between 2005 and 2009, and of 25 per cent between 2010 and 2013. However, since 2013, pig numbers appear to have recovered somewhat, increasing seven per cent.

Between 2005 and 2014, poultry numbers have generally been around 14 million. There is some variability in the annual poultry data, which can be affected by operational factors such as poultry sheds temporarily being empty, for a period including census day, to allow for cleaning. Following restructuring within the industry in recent years, there was an 11 per cent fall in 2015, but this has been followed by an eight per cent rise (1.06 million) this year.

Historically, cattle numbers peaked in 1974 and have been declining since, with levels now back to those seen in the late 1950s. Sheep numbers saw peaks in the 1930s, 1960s and 1990s, but, despite rises in each of the last three years, are currently at levels last seen in the 1940s. Pig numbers saw a very large increase in the 1950s, but about two-thirds of this increase has now been lost. Poultry numbers saw a large increase in the 1970s and have generally fluctuated between 13 million and 15 million since then.

3.12 Cattle

Chart 13: Cattle population, June 2016



In June 2016, the cattle population was 1.80 million. Looking at those female cattle aged one year and over, the number of beef cattle was 711,000, or 40 per cent of the total; more than two and a half times greater than the number of dairy cattle (276,000, or 15 per cent). In both of these categories, the majority of cattle were those over two years old with offspring.

Male cattle aged one year and over made up 15 per cent of the total, while 30 per cent were calves under one year old. The distribution of cattle amongst the categories displayed in Chart 13 is similar to June 2015.

Overall trends in cattle were described in Section 3.11, with the total number falling 195,000 (9.7 per cent) from 2.00 million in 2006 to 1.80 million in 2016. Chart 14 displays the relative trends of cows in the dairy and beef herds since 2006, the first year in which CTS data were available.

900,000 800,000 Beef cattle 700,000 600,000 Calves 500,000 400,000 Male cattle 300,000 Dairy cattle 200,000 100,000 0 2011 2006 2007 2008 2009 2010 2012 2013 2014 2015 2016

Chart 14: Dairy & beef herd trends, 2006 to 2016

Total cattle numbers decreased, slightly, by 1,800 or 0.1 per cent over the year to June 2016. This however, represents a modest drop in figures following the drop of 4.8 per cent over the four year period from 2010 to 2014. Much of the drop since 2006 can be attributed to higher costs reducing margins, offsetting the benefits of increased prices. However, it must also be noted that this forms part of a downward trend evident since the 1970s.

Differing trends between dairy and beef cattle are seen over the period. There has been a generally upwards trend in the numbers of dairy cattle since a low of 265,000 in 2011, the slight drop in 2016 accompanied low milk prices in the year leading up to June. Nevertheless, the figure of 276,000 was the fourth highest figure in the last ten years. Beef cattle, meanwhile, rose this year for the first time since 2010 (the only other rise in the past ten years).

While there has been minimal change among the main cattle categories between 2015 and 2016, one trend evident this year is a shift from older towards younger cattle. For example, while the number of dairy cattle fell only slightly (by 1,600 or 0.6 per cent), the sizeable drop in the number of dairy cattle aged two and over without offspring (by 4,800 or 10.3 per cent) was largely offset by an increase in the number of one year-old dairy cattle (up 3,800 or 6.8 per cent). A similar trend was evident within the beef cattle numbers.

Again, among male cattle, the decrease of 2,500 (0.9 per cent), mostly driven by a drop in the number aged two years and over, was set against an increase in one year-olds. The number of calves remained fairly steady (up 840 or 0.2 per cent).

Limousin remained the most popular breed in Scotland, followed by Aberdeen Angus and Simmental. Among dairy breeds, Holstein Friesian accounted for over 60 per cent of dairy cattle. Eighty-four per cent of beef cattle were cross-bred, whereas 89 per cent of dairy cattle were pure-bred.

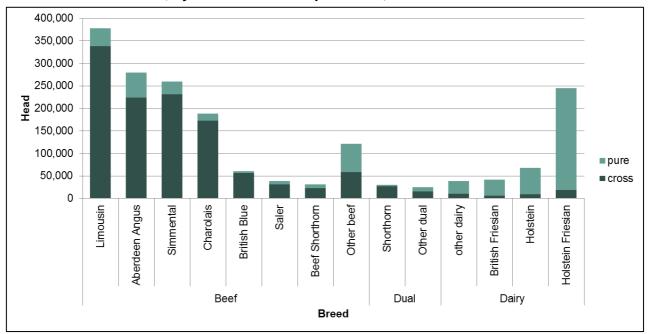
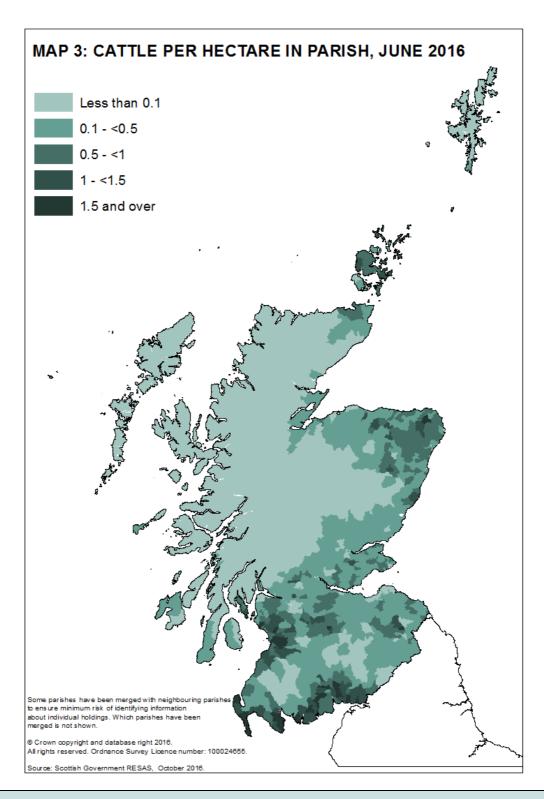


Chart 15: Cattle breeds, by use and whether pure-bred, June 2016

Map 3 shows the number of cattle per hectare, using the total area in the parish, not just the area of agricultural land. Where there are too few producers in an area the data are deemed disclosive and so are grouped with a neighbouring area or areas. The overall pattern is not considered to be too adversely affected by this suppression.

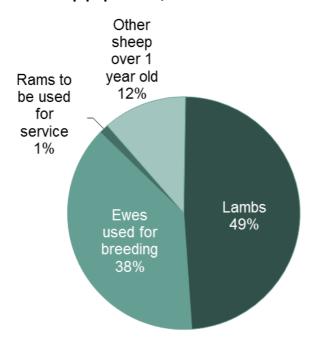


The latest annual trends between 2015 and 2016 show:

- A decrease in total cattle of 1,800 (0.1 per cent) to 1.80 million.
- A decrease in the number of dairy cattle of 1,600 (0.6 per cent) to 276,000.
- An increase in the number of beef cattle of 1,500 (0.2 per cent) to 711,000.
- A decrease in the number of dairy cows of 540 (0.3 per cent) to 175,000.
- The number of beef cows remained at 437,000.
- An increase in the number of calves of 840 (0.2 per cent) to 545,000.

3.13 Sheep

Chart 16: Sheep population, June 2016

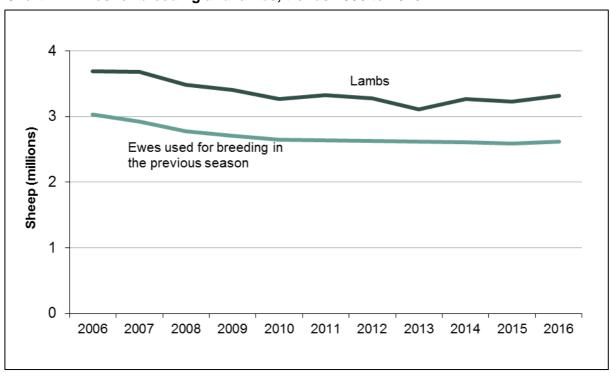


In June 2016 the sheep population was 6.83 million, a 1.9 per cent increase on 2015. Ewes used for breeding in the previous season accounted for 38 per cent of the total, with rams to be used for service just over one per cent. Lambs made up the largest proportion with 49 per cent and other sheep over one year old accounted for 12 per cent. Lamb numbers increased by 90,000 (2.8 per cent) compared with last year.

Overall trends in the sheep population were described in section 3.11, with the total decreasing by 800,000 (10.5 per cent) from 7.63 million in 2006 to 6.83 million in 2016.

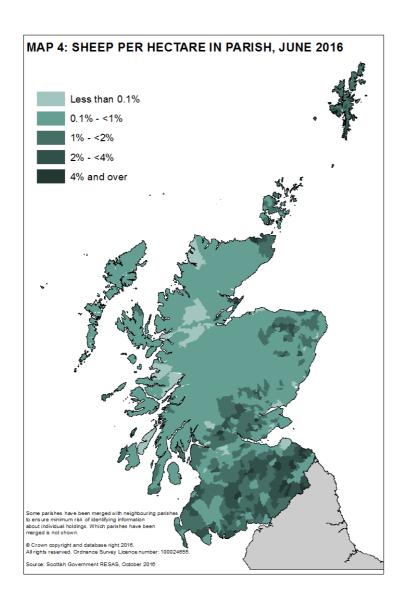
Chart 17 displays trends for breeding ewes and lambs, which in June 2016 made up 87 per cent of the total sheep population. Over the past ten years there has been a decline of 410,000 among ewes for breeding (14 per cent) from 3.03 million in 2006 to 2.62 million in 2016. However, most of this decline occurred between 2006 and 2010, with more modest falls since then. Lamb numbers have declined

Chart 17: Ewes for breeding and lambs, trends 2006 to 2016



alongside ewe numbers for much of the past decade, falling by 590,000 (16 per cent) from 3.69 million in 2006 to 3.11 million in 2013. Since then, however, numbers have recovered somewhat, with rises in two of the past three years.

The introduction of Single Farm Payments in 2005 signalled a steeper decline in sheep numbers than had been witnessed earlier in the decade (following restocking after the 2001 foot and mouth outbreak) with a decrease of 1.13 million sheep evident between 2005 and 2010 (annual average decline of 3.0 per cent).



Since 2010 the number of sheep has generally been around 6.7 million, with fluctuations driven by variability in the number of lambs. The annual lamb numbers have been affected by how harsh the winters and springs have been.

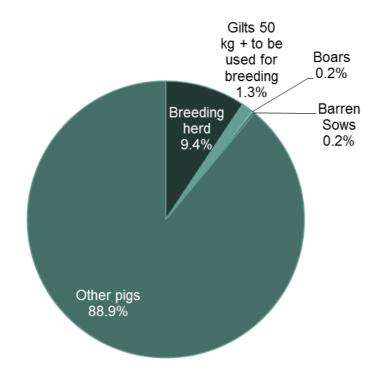
Map 4 shows the number of sheep per hectare, using the total area in the parish, not just the area of agricultural land. Where there are too few producers in an area the data are deemed disclosive and so are grouped with a neighbouring area or areas. The overall pattern is not considered to be too adversely affected by this suppression.

The latest annual trends between 2015 and 2016 show:

- An increase in total sheep of 125,000 (1.9 per cent) to 6.83 million.
- An increase in ewes used for breeding of 30,000 (1.2 per cent) to 2.62 million.
- An increase in lambs of 90,000 (2.8 per cent) to 3.32 million.
- An increase in other sheep aged one year and over of 1,800 (0.2 per cent) to 798,000.

3.14 Pigs

Chart 18: Pig population, June 2016



In June 2016 the pig population was 330,000. The breeding herd accounted for 9.4 per cent of the total, with a further 1.3 per cent being gilts (over 50 kg) to be used for future breeding. Boars and barren sows made up only 0.2 per cent of the population each while the vast majority (89 per cent) were other pigs most of which would be used for meat production.

Chart 19 shows the relative trends over the past ten years of the breeding herd and of other pigs (mostly used for meat production). Note that each data series has a different axis, with breeding herd numbers shown on the left axis and other pig numbers on the right axis.

Overall trends in the pig population were briefly described in Section 3.11, with the total decreasing from 464,000 in 2006 to 330,000 in 2016 (a drop of 29 per cent). Over the same period, the breeding herd decreased by 10,800 (26 per cent) to 31,000 whilst other pigs for fattening decreased by 120,000 (29 per cent) to 294,000.

Pig numbers have been declining steadily since a peak in the late 1990s. They dropped below 300,000 in December 2013⁵ following the closure of the Hall's meat processing factory in late 2012. However pig numbers have risen every year since 2014. Over the last twelve months total pig numbers rose by 12,500 (four per cent) to 330,000, mainly driven by fattening pigs, which rose by 15,000 (5.4 per cent) to 294,000.

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www.gov.scot/Publications/2014/03/6349

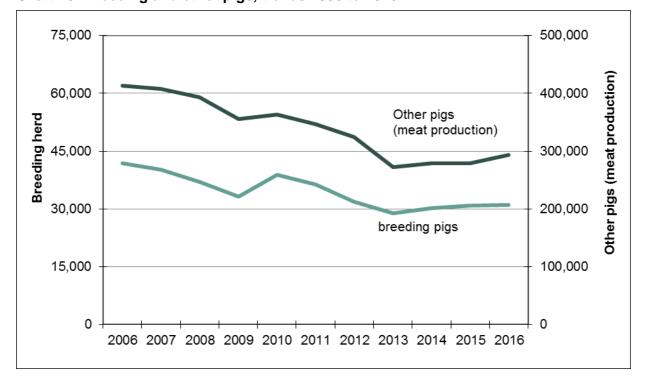
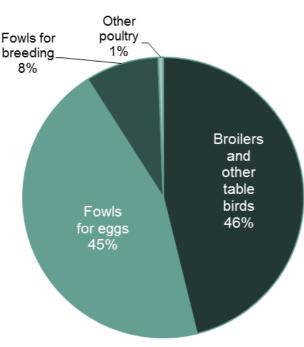


Chart 19: Breeding and other pigs, trends 2006 to 2016

The latest annual trends between 2015 and 2016 show:

- An increase in total pigs of 12,500 (3.9 per cent) to 330,000.
- An increase in the breeding herd of 124 (0.4 per cent) to 31,000.
- An increase in other pigs (mostly for meat production) of 15,000 (5.4 per cent) to 294,000

3.15 Poultry



In June 2016 the total poultry population was 14.11 million. In recent years, the number of broilers has declined, and now only account for 46 per cent of the poultry flock. Almost as many (45 per cent) are hens and pullets in, or being reared for, the laying flock. Fowls for breeding accounted for 8 per cent. Other poultry (including turkeys) made up just under one per cent of the total.

Overall trends in the poultry population were described in Section 3.11, with the total fluctuating around 14 million, though restructuring within the industry in 2015 so saw the figure dip

temporarily to just over 13 million.

Chart 21 shows differing trends over the past ten years for poultry used for meat and egg production. There has been an increase in the number of fowls for producing eggs (up 2.7 million or 76 per cent) between 2006 and 2016. There has been a decrease in broilers and other table birds of 2.05 million (24 per cent) over the last ten years, with particularly large falls since 2012. The breeding flock also fell, by 176,000 (13 per cent) to 1.19 million.

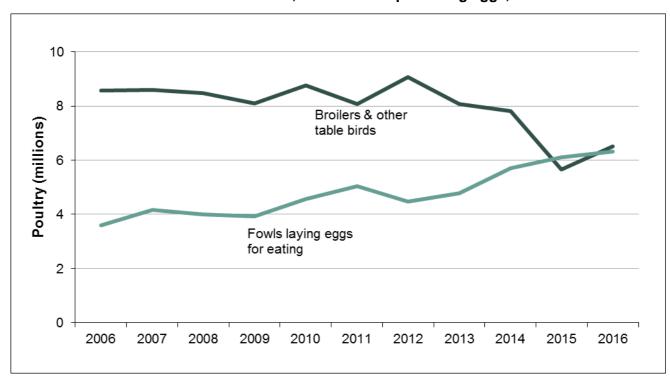


Chart 21: Trends in broiler & table birds, and fowls for producing eggs, 2006 to 2016

The EU Directive 1999/74/EC, which placed minimum requirements on the size and conditions of cage systems was introduced in 2012 and was accompanied by a fall in the number of fowls producing eggs in that year's census. However, the number of fowls producing eggs has risen by 1.86 million in the four years since, linked also to a switch from broiler production. The number of fowls producing eggs in June 2016 was the highest figure over the ten year period.

The latest annual trends between 2015 and 2016 show:

- An increase in total poultry of 1.06 million (eight per cent) to 14.11 million
- An increase in fowls laying eggs for eating of 216,000 (3.5 per cent) to 6.33 million.
- An increase in broiler and other table birds of 840,000 (15 per cent) to 6.51 million.

3.16 Other Livestock

The number of "horses not for agricultural use" has increased over the past ten years by 4,000 (13 per cent) to 34,000. There were only a small number of horses used for agriculture, totalling 1,300 in 2016, though these have risen in number for seven consecutive years. There were an estimated 1,450 donkeys in June 2016. Note that data on donkeys were collected separately for the first time in 2015 and, prior to this, some donkeys were included in the non-agricultural horse numbers.

Since 2006, the number of farmed deer has varied between a high of 7,200 (in 2015) and a low of 5,900 (in 2009). Between 2015 and 2016 the number of deer fell by 230 (3.2 per cent) to 7,000.

Information on bee hives has been collected since 2014, and returns showed that there were an estimated 4,900 beehives on agricultural holdings in June 2016. This includes hives that were present on agricultural holdings on census day, whether owned or brought in.

There were an estimated 1,800 camelids on holdings in June 2016, almost unchanged from the previous year. Not every holding completes a census form each year, and so it can take several years to achieve complete coverage for new livestock categories. The estimates for camelids, beehives and donkeys include a scaling up of the recorded figures to take into account holdings that have yet to be included in the census sample. These estimates will become more accurate once data have been collected for several years. See notes section 4.5 for more details of methodology.

Note that in chart 22, the data for non-agricultural horses are relative to the right-hand axis, with all other livestock on the left-hand axis.

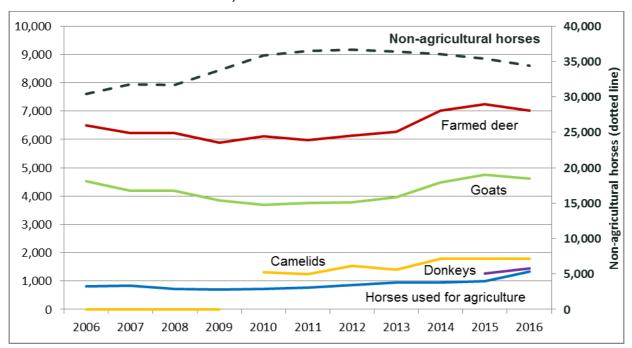
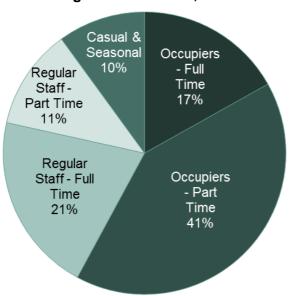


Chart 22: Other livestock trends, 2006 to 2016

3.17 Agricultural Labour

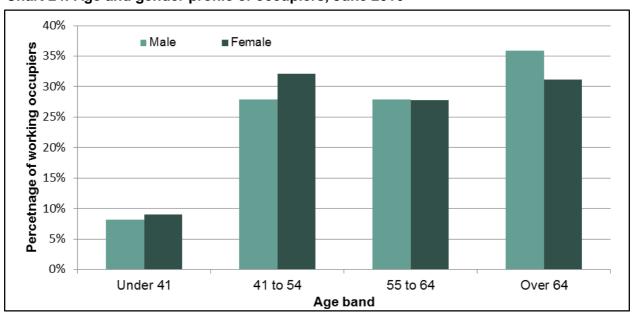
Chart 23: Agricultural labour, June 2016



On the 1st June 2016, there were 63,400 people (headcount) working on agricultural holdings. Working occupiers⁶ made up 58 per cent of the total workers (split between 17 per cent full-time and 41 per cent part-time). Regular staff accounted for 32 per cent of total workers (of which more were working full-time than part-time). A further breakdown of the various categories included within regular staff can be found in Chart 29. Casual and seasonal workers represented ten per cent of the total.

This year, 64 per cent of working occupiers were male. Working male occupiers were more likely to be older, with 36 per cent of male occupiers aged under 55 compared with 41 per cent of female occupiers. It is also evident that the gender profile of occupiers differs between full time (83 per cent male) and part time occupiers (53 per cent male). This data is based solely on actual returns for holdings which returned information on occupier age and gender in 2016.

Chart 24: Age and gender profile of occupiers, June 2016



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⁶ On our forms, and in previous publications, we have distinguished between occupiers and spouses. In this publication we have combined these categories under the title of "occupier".

Between 2015 and 2016, the number of people working in agriculture decreased by 1,900 (three per cent). This follows similar drops in 2013, 2014 and 2015. The fall in numbers was largely driven by a drop in the number of working occupiers which fell by 1,200 (3.3 per cent). There was also a notable decrease in the number of casual and seasonal workers, which dropped by 490 (seven per cent) to 6,350, the lowest figure since 2010.

It should be noted that some of the annual changes in labour in the past may have been affected by changes in the census form. Inclusion of EC Farm Structure Survey (FSS) questions on the June 2010 census (and the associated redesign of the survey form) led to some labour sections either not being reported correctly or being missed out by survey respondents. In 2011 the census form reverted back to its usual design and, it appears, has resulted in a spike or drop for some labour categories in 2010, particularly evident in the numbers for occupiers and male regular staff.

Looking at longer-term trends, the number of people working on agricultural holdings has fluctuated over the last ten years from a high of 68,400 in 2012 to a low of 63,400 in 2016, the figure for 2016 being the lowest figure since our current records began in 1982. These totals need to be treated with some caution as they include differing trends for full-time and part-time occupiers, and regular employees. Full-time equivalent figures, were they available, might give a different picture. In addition, the drop in numbers of occupiers may be partly due to the fact that, following the addition of the question about non-working occupiers in 2011⁷, not all holdings would have been included in the census samples in the years afterwards and so had the opportunity to respond. This has potentially resulted in an overcount of the number of working individuals and an undercount in the number of non-working individuals, in the years that followed, though the effect of this decreases each year.

Chart 25 shows that trends for occupiers and regular employees reflect some similarity with the total workforce figures, portraying a gentle decline over the ten year period, with a slightly steeper drop and recovery in the years 2006 to 2010. Compared with 2006, the total number of working occupiers is now 5,400 lower (13 per cent), whilst the number of regular employees is virtually unchanged at 20,400.

In contrast, the number of casual and seasonal workers – largely associated with the soft fruit sector - is up 1,800 or 40 per cent since 2006. Figures on migrant workers, published for the first time this year, show that 430,000 person working days were undertaken in the year to June 2016, down 6.5 per cent on the previous year. On the basis that one full time employee works the equivalent of 1,900 hours per year, this figure equates to around 1,800 people working full time (note however that this is a notional figure rather than a headcount).

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 $^{^{7}}$ There was no question on non-working occupiers in 2012. Figures were estimated for that year.



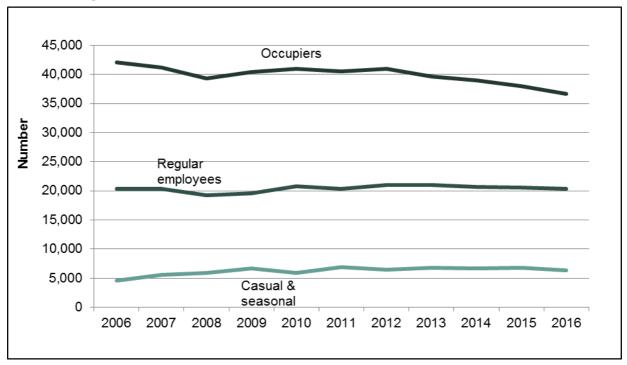
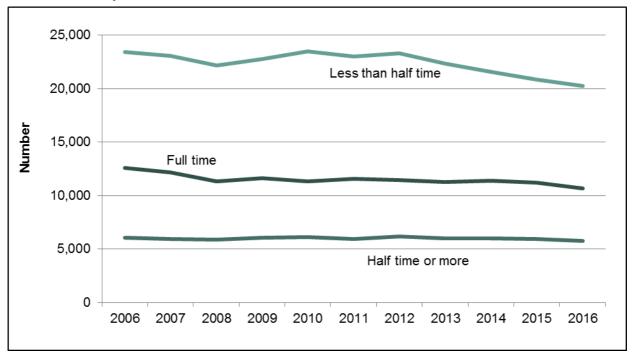


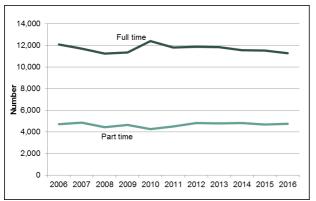
Chart 26 below provides a further breakdown of trends in working occupiers. It shows that, from 2006, numbers of full-time occupiers declined from 12,600 to 11,300 in 2008, with numbers falling only slightly (by 640 or six per cent) since then. The number of occupiers working part-time but "half-time or more" has been close to around 6,000 since 2006, whereas the number of occupiers working "less than half-time" has been more variable, with a rise of 1,300 (six per cent) between 2008 and 2010 followed by a fall of 3,200 (14 per cent) from 2010 to 2016. However, this category may have been particularly affected by the introduction of the non-working occupier question in 2011. It is also worth noting that high figures in 2010 may be an effect of adding the FSS questions and altering the design of the form for that year.

Chart 26: Occupiers, trends, 2006 to 2016



Charts 27 and 28 provide a further breakdown of trends in regular employed staff. They show that the overall trends are almost entirely driven by trends in full time male staff. The numbers of full-time male staff decreased by 830 (6.8 per cent) between 2006 and 2008. Other than 2010, numbers have remained around 11,500. The trend in full-time female staff, meanwhile, was generally upward, with a rise of 360 (25 per cent) over the 10 year period. In both cases, a spike in 2010 is particularly noticeable, but the possible effect of the merger of the 2010 FSS with the Census that year should be borne in mind.

Chart 27: Regular male staff, trends 2006 to Chart 28: Regular female staff, trends 2006 to 2016



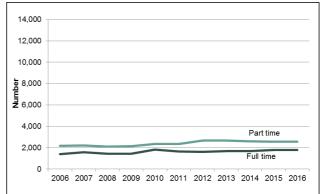


Chart 29: Regular staff, June 2016

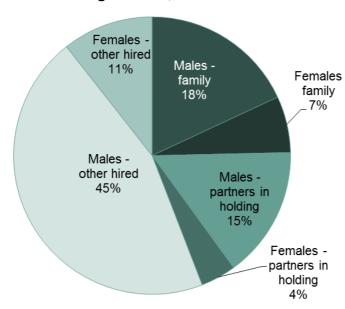


Chart 29 shows, in greater detail, the relative proportions of regular staff noted in Charts 26 and 27. On the 1st June 2016, there were 20,400 regular staff working on agricultural holdings, down 0.9 per cent from the previous year.

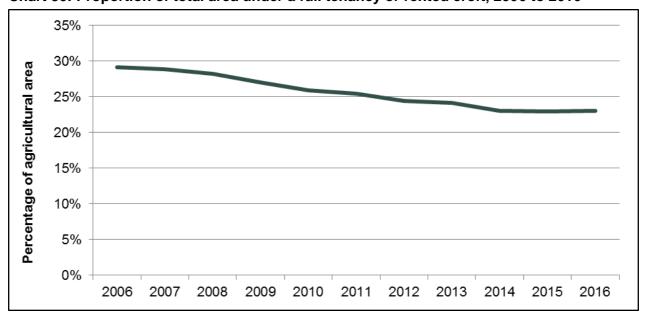
One quarter were members of occupiers' families and a further 19 per cent were business partners in the holding. The remaining staff were hired staff (56 per cent), the majority of whom were males. These proportions are similar to those in 2015.

3.18 Rented land

Information on agricultural crofts and tenancy arrangements is collected in the June agricultural census for those holdings that rent land.

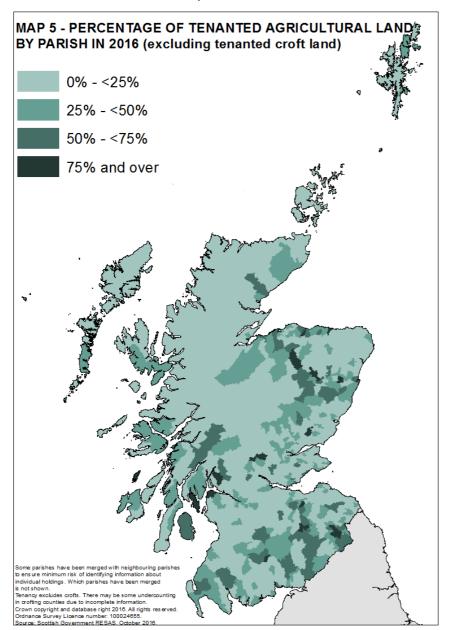
In 2016 there were 1.32 million hectares of land rented (including crofts and excluding seasonal lets), similar to the area in 2015. In 2016 rented land accounted for 23 per cent of agricultural land, compared with 29 per cent of agricultural land in 2006. While the area of land under secure tenancy till dropped (down 53,000 hectares), this was countered by a rise of the same magnitude in the area associated with fixed term tenancies. Note that areas of land rented under various tenancy agreements are estimated based on data received from holdings.

Chart 30: Proportion of total area under a full tenancy or rented croft, 2006 to 2016



Information on how these figures have been calculated here is available in section 4.12.

Map 5 shows the geographic distribution of tenanted land (excluding crofts). Tenanted land was more prevalent south of the central belt, in Angus and Moray



and around the mouth of the Clyde.

3.19 Holdings renting land for one year or more

In 2016 there were 16,500 holdings with rented land. Of these holdings, 10,000 were on the Crofting Commission Register or had recorded they were renting a croft. The other 6,500 holdings had other types of rental arrangement (91 Act tenancy, 91 Act Ltd Partnership, SDLT, LDT, or SLA) only. However, some crofts may also rent land under these other arrangements. Of the 7,800 holdings with crofts that provided data, 70 (0.9 per cent) had other tenancy arrangements in

addition to their crofting tenancy. If this proportion is applied to the 2,200 holdings with crofts that have not provided tenancy type data, that would imply that a total of 89 holdings with crofts also have other tenancy arrangements. Summing the 6,500 holdings with non-croft tenancies to these 89 holdings provides us with a figure of 6,600 holdings with non-croft tenancy arrangements.

Table 10 and chart 31 provide these figures from 2008 to 2016. The estimated number of holdings with a (non-croft) tenancy agreement has fallen by 22 (0.3 per cent) since last year, and fallen 1,460 (18 per cent) since 2008.

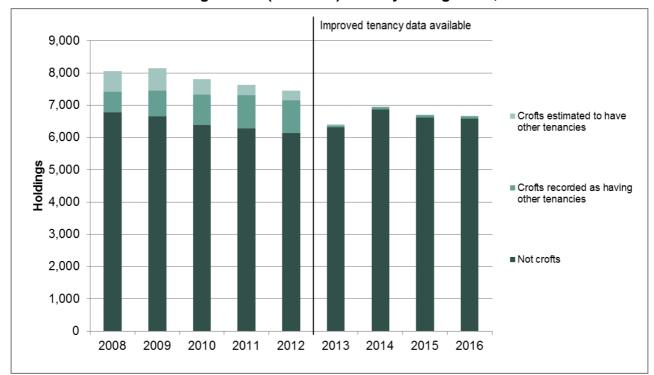


Chart 31: Number of holdings with a (non-croft) tenancy arrangement, 2008 to 2016

There are six different types of rental arrangements recorded on the June Agricultural Census. They are:

- Rented croft (found only in crofting counties and areas defined in legislation)
- Small Landholders Act Tenancy (lease of land only where the tenant provides all equipment, including the house)
- 91 Act tenancy: A tenancy for one year or more with full security of tenure and succession rights.
- 91 Act, Ltd Partnership: A tenancy for one year or more where the tenant is in a limited partnership.
- Short Limited Duration Tenancy (SLDT): entered into for between one and five years duration.
- Limited Duration Tenancy (LDT): entered into on or after Martinmas (28th November) 2003 for ten years or more and with a specific end date.

Please note that although census data on the area of rented land is considered sufficiently complete, a considerable amount of data identifying what type of tenancy they are held under is incomplete. Detailed tenancy information has only been collected on the June Agricultural Census since 2008. Due to some smaller holdings not being sent a census each year, and some sampled holdings not returning a census or not completing this section, complete coverage of all agricultural holdings in Scotland is not available.

Prior to June 2014, where a rented holding's tenancy type was unavailable, it was, in some cases, assumed that the tenancy was a 91 Act tenancy, this being by far the most common tenancy type. However, this means that 91 Act tenancies were over-estimated, and all other tenancy types were potentially under-estimated.

Measures have been taken to improve the accuracy of data on tenancy agreements for the years since 2013, and information on how these figures have been calculated here is available in section 4.12. However, whilst this has improved the quality of the figures, they are not directly comparable with previous years. Finally, a number of smaller, non-commercial holdings have been removed from the census dataset this year, reducing the number of holdings with tenancy agreements.

Chart 32a and 32b provide a breakdown of tenancy types from 2008 to 2016. Compared with June 2015, there has been a decrease in the number of holdings with a 91 Act tenancy (down 3.5 per cent) and with a 91 Act partnership (down 2.9 per cent), whilst there have been increases in the number with LDTs (up 16 per cent) and SLDTs (up 13 per cent). The most common tenancy type was 91 Act tenancy, which accounted for 72 per cent of agreements on holdings with non-croft tenancy arrangements, slightly down from the figure in 2015.

Chart 32a: Number of holdings by tenancy type, 2008 to 2016

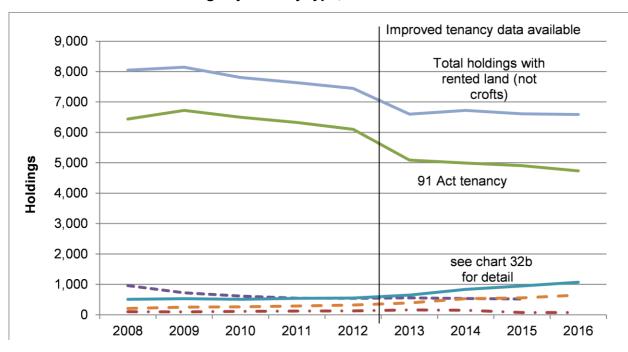
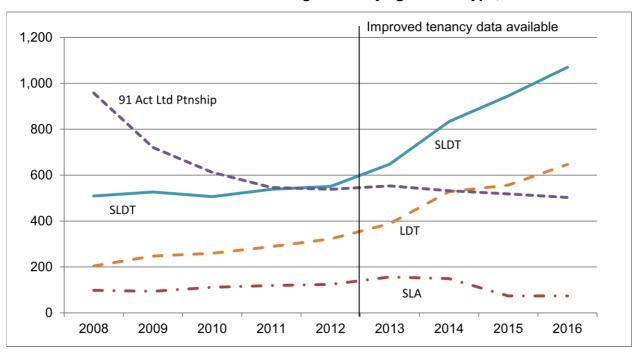


Chart 32b: Croft and non-croft rental arrangements by agreement type, 2008 to 2016



3.20 Holdings renting land on seasonal lets

The current format of the Single Application Form means that we have been unable to provide data on seasonal lets for either 2015 or 2016. Please see the 2014 Census Results⁸ for the most recent available data.

⁸ www.gov.scot/Publications/2014/10/6277

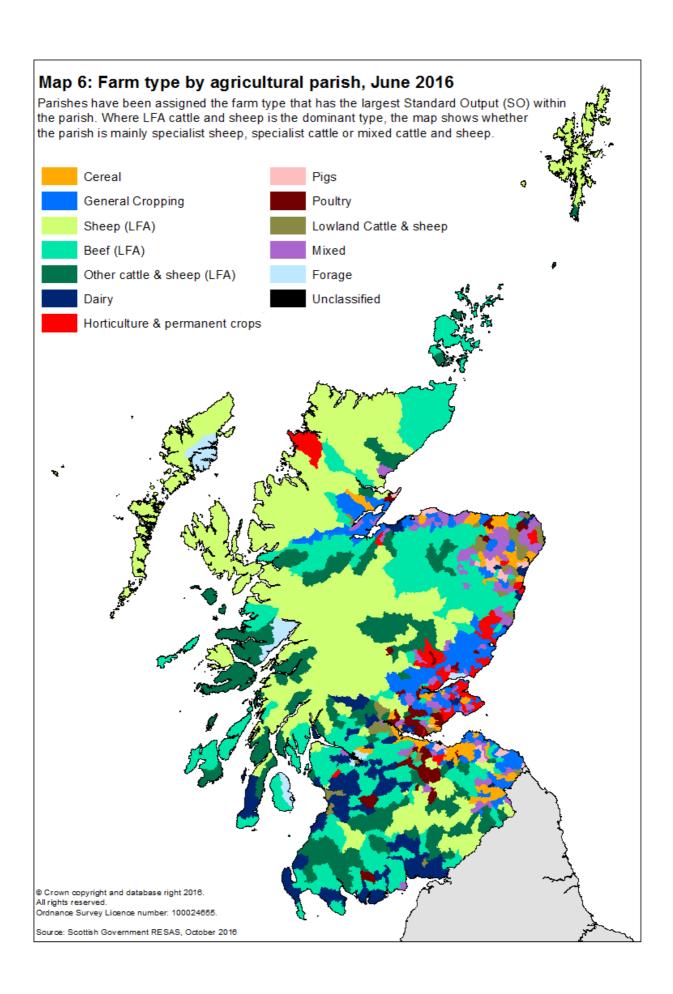
3.21 Farm types

Farm types represent a classification of the main agricultural activity taking place on holdings, based on their Standard Output (SO). SOs represent the notional farm-gate worth generated by a holding by applying multipliers (in £s) to its crops and livestock. These are applied uniformly across Scotland. More information on how farm types were calculated in 2016 can be found in section 4.13. The methodology for allocating farms to farm types has changed slightly since last year.

The most common farm type was forage (21,300 holdings), followed by cattle and sheep (LFA) (14,500 holdings) and mixed holdings (5,200). Non-LFA cattle and sheep, cereal (with around 2,500 holdings each) and general cropping farms (1,700 holdings) were fairly prevalent. Horticulture, poultry and dairy farms each numbered between 700 to 900 while pig holdings were the least common farm type (240 holdings).

Map 6 shows the geographic distribution of these farm types. It should be noted, however, that this shows a generalised view by parish rather than by holdings, with a parish being allocated the farm type of whichever category of farm type has the highest total SO total within the parish. The map also splits LFA cattle and sheep into the categories 'beef' and 'other'.

While the map shows what the most common type is in a given area, it should not be taken to illustrate where activities most commonly take place. For example, it may be correct to imply from the map that cereal farming generally takes place in the east but, despite it being the dominant farm type in the Highlands, it would be wrong to infer that cattle and sheep are more prevalent there than elsewhere in Scotland. In fact, cattle and sheep are generally found south of the central belt and in Grampian – cattle and sheep only dominate in the north-west because of the relatively little amount of other farming activity undertaken there.



4. Notes

4.1 Background

This publication contains final results for the 2016 June Agricultural census and trends over the last ten years.

4.2 Uses of the information

The census is conducted for a wide range of purposes. The statistics help the government to form, monitor and evaluate policy, and to assess the economic well-being of the different agricultural sectors. Most of the data collected is required by the Statistical Office of the European Communities. Equally important is the regular contact with farmers, which enables the department's register to be kept up to date. This means, for example, that information on new animal health requirements, or new subsidy schemes can be quickly directed to relevant farmers.

Most of the data collected are required by the Statistical Office of the European Communities, specifically Council Regulation 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 and half-year production forecasts. There is also a separate EC Regulation covering the submission of winter crops. This information is collated by the Department for Environmental and Rural Affairs (Defra) for submission at member state (UK) level.

Some examples detailing how the census data are or have been used:

to estimate the total income from farming, as part of the Scottish GDP figures and to compile the National Accounts for the UK.

to model various scenarios/options and analyse outcomes/impacts on Scottish agriculture in relation to a range of options on the future of support for Scottish Agriculture.

to provide disease and epidemiology modellers with a snap-shot of livestock numbers and locations (at 1st June) to assist with real-time and emergency planning procedures for animal disease outbreaks.

UK ammonia and greenhouse gas inventories – the census provides Scottish agricultural land and livestock data.

to support work on various research packages such as assessing the potential impact of CAP (Common Agricultural Policy) reform on payments to farmers; early environment effects on animal health and welfare; assessing the effectiveness of measures to manage water quality and control diffuse water pollution.

The census is also used by the main research providers working for the Scottish Government on numerous projects and underpins the majority of the analysis and research that is carried out, and to provide sampling frames for this research. In

some cases it is also used to identify holdings for receipt of important and relevant information by mail, subject to the terms of Section 80 of the Agriculture Act 1947⁹.

4.3 June Census outputs

Results from the June census are available to the public as follows:

The Annual Abstract of Statistics presents a time series from 1982 onwards which also contains some additional detail on selected items (common grazing, land tenure etc.). It is available to download as a spreadsheet along with this publication and can be accessed here:

http://www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubAbstract/AbstractPub

Previous editions of the Abstract can be accessed here: www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubAbstract

The outputs from the census on livestock and crops are also used as key inputs to the Total Income from Farming (TIFF) model, which is used to estimate the value of agricultural productivity in Scotland. Headline results are published each January with more detailed analysis presented in the Economic Report on Scottish Agriculture (ERSA), which is published in May or June of each year. Results for TIFF can be accessed as follows:

www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/ResultsTIFFFBI

The Economic Report on Scottish Agriculture (ERSA) is a compendium publication which contains detailed statistics on Scottish agriculture. It contains three sections covering, (i) Total Income From Farming (TIFF – see above for more details), (ii) Farm Accounts analysis (income and expenditure statistics by different farm types) and (iii) additional statistics/analysis from the June census e.g. more detail is provided on the structure and composition of Scottish agriculture in terms of the types of activity on holdings, additional geographic analysis is provided along with some UK comparisons.

www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubEconomicReport

Geographical results for the June census in years prior to 2010 are available in the Geographical Summary Sheets which provides analysis by the 14 agricultural geographic areas within Scotland. Results for the June census from 2010 onwards have been incorporated into ERSA.

www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubScottishCensus

The Agricultural Facts and Figures pocketbook 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

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⁹ www.legislation.gov.uk/ukpga/Geo6/10-11/48/part/V/crossheading/statistics-of-agriculture-ingreat-britain

EC regulations

The EC demands that each member state collect agricultural statistics every year, enforced through a number of EC regulations relating primarily to crops and livestock. Specific regulations are listed on pages 11 to 13 of our 2013/14 annual statistics plan; a link is provided here:

www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/scotstat/planning

These regulations are legally enforceable by the EC, meaning that member states must comply with the data collection requirements in order to avoid financial penalties. In Scotland, the June census is the main survey that is used to meet these requirements as part of providing a response to the EC at a UK level.

We also use the June census to contribute to the formulation and publication of UK statistics on agriculture. These publications are co-ordinated by Defra and more details are available here:

<u>www.gov.uk/government/publications?departments%5B%5D=department-forenvironment-food-rural-affairs&publication_filter_option=statistics</u>

4.4 Data collection

The June Agricultural Census is conducted annually by the Scottish Government's Rural and Environmental Science Analytical Services division (RESAS). Data are requested from all holdings who submitted a Single Application Form (SAF) in the previous year, together with some other large businesses that would not be eligible for support payments. A sample of holdings which didn't submit a SAF or who didn't return a form last year were also sent a census form.

Data for the June census is collected from three sources:

Land data were extracted from the Single Application Form (SAF) database for around 23,700 holdings that are claiming Basic Payment (BP). Holdings that submitted a SAF in 2015 were also sent a cut-down census form (23,400 forms) to collect the additional data on livestock and labour. See section 4.7 for more details on the use of SAF data.

From the remaining holdings that did not complete a SAF in 2015, 8,200 (potentially including holdings that submitted a SAF for the first time in 2016) were sent a full census form covering land, livestock and labour.

All cattle data (including data on cattle breeds) were collected from the Cattle Tracing Scheme administrative source. This means that we effectively have 100 per cent coverage, even for those smaller holdings that were not selected for inclusion in the census.

The following table gives a breakdown for forms returned for each category of holding.

Land-use data was received for holdings covering 90 per cent of the total agricultural area, either from returned full census forms or the SAF (shaded grey).

Cattle data was received for 100 per cent of holdings with cattle, from the CTS.

Other data was received for holdings covering 67 per cent of the total agricultural area, from returned census forms (the final column in the table).

| Census type ⁽¹⁾ | Total number | Number selected ⁽²⁾ | Number of returns ⁽³⁾ | Total area | Area of selected ⁽²⁾ | Area of returns ⁽³ |
|----------------------------|-----------------|--------------------------------|----------------------------------|---------------|---------------------------------|-------------------------------|
| SAF | 23,683 | 23,027 | 16,567 | 4,900,309 | 4,853,166 | 3,492,922 |
| full form | | 509 | 290 | | 90,839 | 60,138 |
| part form | | 22,518 | 16,277 | | 4,762,327 | 3,432,784 |
| Non-SAF | 28,213 | 8,533 | 4,407 | 751,843 | 494,870 | 297,117 |
| full form | | 7,631 | 3,896 | | 386,739 | 224,459 |
| part form | | 916 | 523 | | 108,131 | 72,658 |
| Total | 51,896 | 31,574 | 20,975 | 5,652,152 | 5,348,036 | 3,790,039 |

^{(1) &}quot;SAF" refers to holdings where land-use data is available from the Single Application Form dataset. "Non-SAF" refers to holdings where land-use data is only available through the June Agricultural Census form (if at all).

4.5 Treatment of non-response

In Scotland the registered details of the 51,896 agricultural holdings are used to maintain a holding-level dataset of agriculture for statistical purposes. This provides a virtually complete coverage of agricultural activity in Scotland. However, please note that:

- we do not conduct a full census as this would place an unnecessary burden on farmers.
- for the selected holdings that are surveyed, not all farmers return data to us.
- gaps in our holding-level data set are 'maintained' by producing estimates.

Estimates are produced for holdings which were (i) not surveyed and (ii) surveyed but did not provide a response, either to the whole form or to certain questions. Holdings are divided into strata (using farm type and 'economic' size) and estimates are made (using ratio estimation) for non-responders within each separate stratum. Estimates are restricted to a maximum of +/-2.5% change on the previous year for each holding, in order to avoid artificial distortion in the overall statistics. Artificial distortion can occur when large actual changes in a small number of holdings within a stratum are applied to non-response holdings in the same stratum.

Within each stratum, land, livestock and labour values for non-response holdings are calculated by looking at those holdings that returned data in 2016 and

[&]quot;full form" refers to the long version of the census form covering land use, livestock (except cattle), and labour, designed for those not completing the SAF.

[&]quot;part form" refers to the short version of the census form covering livestock (except cattle), and labour, designed for those known to be completing the SAF.

⁽²⁾ The numbers selected are slightly lower than the total number eventually identified due to annual changes in the list of holdings.

⁽³⁾ The return numbers quoted here relate to the number of survey forms received. For SAF holdings this masks the fact that we effectively receive 100 per cent response for all land items. Cattle data, from the CTS database, is also effectively 100 per cent complete. Response rates based on these figures therefore relate to other livestock and employment data.

calculating the percentage change since their previous census responses. These percentages are applied to the non-responders' previous data for the corresponding years. That is, if a given non-responder last returned data in 2008, the percentage change for holdings returning data in both 2008 and 2016 is calculated, and this is applied to the 2008 data for the non-responder to give an estimate for 2016. Labour figures are rolled forward using the most recently returned data.

These changes in the method of imputation were introduced for the 2014 Census. More information on these changes can be found in that year's publication.¹⁰

Since 2014, data have been collected for beehives and blueberries. Where a census hasn't been returned in 2014 or 2015, figures for blueberries were imputed based on past responses for mixed and other fruit before relative proportions based on actual responses were used to calculate the final figures for blueberries and mixed/other fruit.

Note, however, that trend information is limited only to the previous year for beehives and donkeys, which were first specifically collected in 2015. Consequently, alongside the figures for actual responses, we have provided an estimate, based on actual returns within each stratum (based on size and type), to account for non-response and for holdings which were not sampled.

4.6 Data quality

Relevance

The content of the census and any changes to it are agreed with a range of Scottish Government divisions and, where necessary, the Scotstat network. The survey provides data used by both the Scottish Government and the EU to assess agricultural activity, in the monitoring and development of policy (see section 4.2 above).

Accuracy

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) autochecking 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.

See sections 4.4 and 4.5 for further information on survey methodology.

¹⁰ www.gov.scot/Publications/2014/10/6277/4

Timeliness and Punctuality

Results have been published about five months after the census date. The census date was set at 1st June 2016, with returns requested by 15th June. However, forms were still being received throughout September, when the census was then closed to finalise results. Forms received after closure of the census are used for imputation of the following year's census, and will be incorporated into revisions published alongside the results of the June 2017 census.

Accessibility and Clarity

These statistics are made available online at the Scottish Government's statistics website in accessible formats (html and pdf versions are available). All data tables are made available in Excel format to allow users to carry out further analysis. We encourage feedback on the content and format of our publications.

Comparability

The publication includes comparable data from the previous ten years' censuses, with data from years prior to that published in the accompanying abstract.

The change to collecting some administrative data via the Single Application Form led to some apparent discontinuities in the data between 2008 and 2009. Likewise a change in the collection of data on strawberries and raspberries has led to some discontinuities between 2010 and 2011 and between 2011 and 2012 (see section 4.7). Further changes to data collection in 2015 led to discontinuities in grass, rough grazing, woodland, other land between 2014 and 2015 and also led to the non-availability of seasonally let land in 2015 (see section 4.7).

Use of data from the Cattle Tracing Scheme means that cattle data prior to 2006 are not directly comparable, though they have been scaled up by about three per cent where comparison is necessary.

4.7 Use of administrative data from the Single Application Form

Since 2009, data on land use has been obtained from the **Single Application Form** (SAF). These data were combined with land use data from all the other holdings, collected through June Census forms, to generate overall June Census results. This development led to a substantial reduction in statistical data collection and an overall improvement in the quality of land use statistics. In 2015 SAF data was obtained for 23,800 agricultural holdings.

While the method of incorporating SAF data is believed to be more accurate than the previous method, it resulted in a **step change** in some of the land use results for 2009, especially for **rough grazing and grass**. This meant that changes between 2008 and 2009 for these land use categories did not represent genuine changes in land use, but rather differences in the way this data had been reported. These should therefore be treated with caution.

In 2015 the definitions of temporary and permanent grass were changed on the SAF. From 2015, temporary grass relates to whether it has been reseeded in the last five years, whereas previously it related to how long it had been used for grass. The new definition only includes land that is included in a holding's crop rotation. This means changes between 2014 and 2015 in **grass under 5 years old**, and **grass 5 years and older** do not represent genuine changes in land use, but instead differences in how grass data were recorded.

Changes made in 2015 to the ways in which **rough grazing**, **woodland**, **other land and seasonally let land** were collected on the SAF have carried forward to this year. This has affected the level of detail available in these land use categories for some holdings while data on seasonally let land data could not be collected. Consequently, for SAF holdings, about 534,000 hectares of rough grazing, woodland and other land data had to be imputed (nine per cent of the total agricultural area). This included 26,000 hectares of rough grazing (one per cent), 375,000 hectares of woodland (75 per cent) and 133,000 hectares of other land (86 per cent).

The imputation was based on the results for the holding from previous years, as well as the results from similar holdings in the current year. The increase in the amount of imputation means that the results are less precise than was the case in 2014. However we believe the accuracy of the data is still higher than with the method used prior to the introduction of SAF data in 2009.

4.8 Collection of cattle data through the Cattle Tracing Scheme

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, cattle data has been obtained through the Cattle Tracing System (CTS) since June 2013. CTS, an administrative data source held by the British Cattle Movement Service (BCMS), records cattle movements across Great Britain and has also been used to obtain cattle figures for England and Wales since 2007.

Usable data from the CTS is only available for Scotland from 2006. For comparability, tables containing data collected via the survey methods used up until June 2012 have been included. For those years where both census and CTS data are available, CTS data have been, on average, 3.2 per cent higher than that collected through the census.

Further information relating to the collection of CTS data can be found in Annex A of the Economic Report on Scottish Agriculture 2013¹¹.

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¹¹ http://www.gov.scot/Publications/2013/06/5219/11

4.9 Respondent burden

One of the recommendations resulting from the UKSA assessment of Scottish Government agricultural statistics was to report annually on the estimated costs of farmers responding to the agricultural surveys.

To determine how long it took farmers to complete the December survey, around 110 farmers were asked over the telephone for an estimate of the total time it took them to fill in the form itself as well as the time taken to read guidance notes, count livestock or consult business records containing information required to fill in the form etc. More information on how this exercise was conducted can be found in the results from the 2011 December Survey of Main Holdings: http://www.gov.scot/Publications/2012/03/7513

A median time of 30 minutes was derived from this survey of farmers in December and is the figure used as the baseline for calculating respondent burden for the June Census. Calculations for estimating respondent burden for the June Census are based on the assumption that the partial form completed by those also submitting a Single Application Form (SAF) takes around the same time to complete as the December Survey form, while the full June Census form takes twice as long.

The table below employs formulae based on guidance given by the Scottish Government Statistics group. It is estimated that farmers spent 12,600 hours completing the June Census forms in 2016 at a cost of £170,000:

| Number of responses (partial form) | 16,789 |
|--|----------|
| Median time taken to respond in hours | 0.5 |
| Time taken to respond to partial form in hours | 8,395 |
| Number of responses (full form) | 4,217 |
| Median time taken to respond in hours | 1 |
| Time taken to respond to full form in hours | 4,217 |
| Total hours taken to respond to forms | 12,612 |
| Hourly rate of typical respondent* | £13.47 |
| Total cost of responding to June Census forms | £169,884 |

^{* 2015} Annual Survey of Hours and Earnings (ASHE) - Table 3.5a Median "Full Time Gross" hourly pay for males and females

4.10 Revisions

Major revisions to the results from the June Agricultural Census are published on the Scottish Government website:

www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/revisions

4.11 Soft fruit under cover

From 2011 the areas of strawberries and raspberries were collected separately for fruit grown in open fields, under walk-in plastic structures, or in glasshouses.

Further details on these changes are described in the <u>2012 June Agricultural</u> Census. 12

4.12 Full tenancies and seasonal tenancies

The methodology for calculating holdings with rented land and full tenancy arrangements was refined in 2014. In order to calculate a breakdown of tenancy types and associated areas, in cases of non-response, data from the most recently returned data was used. In addition, information returned in 2014 on holdings for which there was previously no tenancy type information available was applied to data for 2013. Additional information from the Crofting Commission has also been applied to data for 2013 and 2014. Estimates for remaining cases of non-response were calculated by applying proportions from actual responses to those holdings with rented land for which no tenancy type information was available. Further work was carried out in 2015 to validate data on Small Landholder Act Tenancies, which has led to a reduction in the estimated number of holdings.

Due to changes in the Single Application Form, data on seasonal tenancies were not available this year. It is hoped that we will be able to collect data in future years. Data on seasonal tenancies was previously published in 'Tenanted Agricultural Land in Scotland 2014¹³.

4.13 Farm Types, Standard Outputs and SLRs

Using results from the Census, holdings are classified into farm types, which are allocated based on the main activity on the farm (as defined by the holding's Standard Output value). Since 2015, the farm type breakdown uses price-derived coefficients based on a five year (2010) centred average. More information on farm types can be found in the Economic Report on Scottish Agriculture¹⁴.

There are eleven basic farm types (cereals, general cropping, horticulture & permanent crops, pigs, poultry, dairy, cattle & sheep (LFA), lowland (non-LFA) cattle a& sheep, mixed, forage and unclassified. 'Unclassified' related to holdings with no SO value (e.g. holdings with fallow land only), whereas 'mixed' is where no single crop or livestock category is dominant.

For 2016, minor changes were made to the way in which holdings were allocated to farm types. These have resulted in 80 holdings shifting from mixed to horticulture and around 900 holdings moving from forage to general cropping.

In addition to the number of holdings and Standard Output values by farm type, table 12 also details Standard Labour Requirement (SLR) values. SLRs represent the notional amount of labour required by a holding to carry out all of its agricultural activity and is also used as a measure of farm size. Standard Labour Requirements are derived at an aggregate level for each agricultural activity. The total SLR for

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¹² http://www.gov.scot/Publications/2012/09/1148/4

¹³ http://www.gov.scot/stats/bulletins/01155

¹⁴ http://www.gov.scot/Publications/2015/06/8844/9

each farm is calculated by multiplying its crop areas and livestock numbers by the appropriate SLR coefficients and then summing the results for all agricultural activity on that farm. One SLR equates to 1,900 working hours per year.

The SLR coefficients used in this publication have changed this year, and now match those used elsewhere in Great Britain. They have been applied to the 2016 crop areas and livestock units of holdings.

4.14 Other publications

The next large agricultural survey will be the 2016 December survey of agricultural holdings. This is a smaller exercise which surveys around 15,000 of the larger holdings, and, since December 2015, has been combined with the Sheep and Goat Annual Inventory. Results will be published in Spring 2017. Results for the 2017 June census will be published in September/October 2017. The European Farm Structure Survey also took place in 2016, with results scheduled for publication in November 2016.

Statistics on the production of meat, milk, eggs and other livestock products are published in the Economic Report on Scottish Agriculture (ERSA). These can show different trends in livestock numbers to those shown above, as they are also dependent on factors such as production yields and international trade in livestock for finishing and slaughter. ERSA also provides statistics on the price and value of livestock and other agricultural outputs. These data can be accessed here: www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubEconomicReport

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

Publications relating to cereal and oilseed rape production can be accessed here: www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubCerealHarvest

Appendix of tables

Final Results of the June 2016 Agricultural Census together with June results for the years 2006 to 2015 for comparison

Table 1a. Agricultural area in hectares, 2006 to 2016

| | | | | b Step cha | ange - use | of SAF Da | ta | | | | | Percentage |
|------------------------------|---------|---------|---------|---------------------|------------|-----------|---------|---------|---------|---------|---------|---------------|
| | | | | | | | | | | | C | hange between |
| | 2006 | 2007 | 2008 | 2009 ⁽¹⁾ | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2015 & 2016 |
| Cereals | | | | | | | | | | | | |
| Wheat | 99,681 | 102,744 | 113,797 | 92,482 | 111,418 | 115,412 | 100,637 | 86,840 | 109,023 | 109,562 | 109,594 | 0.0% |
| Triticale | 1,286 | 1,237 | 1,096 | 612 | 687 | 629 | 554 | 513 | 519 | 626 | 614 | -1.8% |
| Barley | 274,402 | 278,644 | 319,934 | 332,161 | 290,299 | 308,425 | 332,039 | 339,138 | 326,884 | 307,686 | 286,930 | -6.7% |
| Winter barley | 53,762 | 52,625 | 57,612 | 45,149 | 47,948 | 45,477 | 42,816 | 42,694 | 52,507 | 51,808 | 48,031 | -7.3% |
| Spring barley | 220,640 | 226,019 | 262,322 | 287,011 | 242,351 | 262,948 | 289,222 | 296,444 | 274,377 | 255,878 | 238,899 | -6.6% |
| Oats | 22,682 | 20,868 | 21,720 | 22,299 | 22,981 | 21,715 | 23,672 | 31,728 | 25,050 | 25,615 | 31,210 | 21.8% |
| Winter oats | 6,618 | 7,234 | 6,529 | 5,225 | 7,366 | 6,929 | 5,423 | 5,569 | 7,998 | 7,586 | 8,091 | 6.7% |
| Spring oats | 16,064 | 13,634 | 15,191 | 17,074 | 15,615 | 14,785 | 18,249 | 26,159 | 17,052 | 18,029 | 23,119 | 28.2% |
| Rye ⁽²⁾ | : | : | : | : | : | : | : | : | 405 | 915 | 3,725 | 306.9% |
| Mixed grain | 461 | 405 | 239 | 1,230 | 893 | 923 | 807 | 1,373 | 646 | 75 | 18 | -76.2% |
| Total cereals ⁽³⁾ | 398,513 | 403,898 | 456,786 | 448,783 | 426,278 | 447,104 | 457,709 | 459,592 | 462,528 | 444,479 | 432,091 | -2.8% |
| Oilseeds | | | | | | | | | | | | |
| Winter oilseed rape | 30,978 | 34,276 | 31,623 | 26,948 | 34,115 | 36,918 | 35,541 | 31,454 | 36,420 | 35,198 | 30,141 | -14.4% |
| Spring oilseed rape (4) | 2,764 | 2,058 | 2,000 | 2,182 | 1,876 | 1,470 | 1,070 | 2,199 | 720 | 599 | 590 | -21.4% |
| Linseed (4) | 314 | 238 | 179 | : | 105 | 138 | : | : | : | 151 | : | : |
| Total oilseeds | 34,056 | 36,572 | 33,802 | 29,130 | 36,096 | 38,526 | 36,611 | 33,653 | 37,140 | 35,948 | 30,731 | -14.5% |
| | | | | | | | | | | | | |

⁽¹⁾ From 2009, data on land use has been obtained from the Single Application Form (SAF) for holdings claiming Basic Payment Scheme entitlements (previously Single Farm Payments).

⁽²⁾ Area relates only to those holdings who have submitted a Single Application Form (SAF). SAF holdings account for around 90% of land area in Scotland.

⁽³⁾ Total cereals figure includes rye from 2014. Rye was previously counted in 'other crops' (see table 1b).

⁽⁴⁾ In order to prevent disclosure of individual holding data, from 2009, 2012, 2013,2014 and 2016 a small area of linseed was added to the figure for spring oilseed rape

b break in time series

[:] not available

Table 1b. Agricultural area in hectares, 2006 to 2016

| | | | | b Step cha | inge - use o | of SAF Data | l | | | | | Percentage change between |
|----------------------------------|---------|---------|---------|---------------------|--------------|-------------|---------|---------|---------|---------|---------|---------------------------|
| | 2006 | 2007 | 2008 | 2009 ⁽¹⁾ | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2015 & 2016 |
| Peas for combining | 1,490 | 1,790 | 1,480 | 2,025 | 1,668 | 1,198 | 682 | 537 | 616 | 1,470 | 776 | -47.2% |
| Beans for combining | 4,527 | 3,507 | 3,172 | 4,728 | 5,268 | 3,738 | 3,789 | 2,891 | 2,765 | 4,045 | 3,002 | -25.8% |
| Total combine harvested crops | 438,586 | 445,766 | 495,239 | 484,666 | 469,310 | 490,566 | 498,791 | 496,673 | 503,049 | 485,943 | 466,599 | -4.0% |
| Potatoes | | | | | | | | | | | | |
| Seed | 11,440 | 11,450 | 11,720 | 13,511 | 13,491 | 13,305 | 13,002 | 12,623 | 13,300 | 12,115 | 12,760 | 5.3% |
| Ware | 16,711 | 17,868 | 18,116 | 18,187 | 17,876 | 17,768 | 16,534 | 16,486 | 15,211 | 13,649 | 14,766 | 8.2% |
| Total | 28,151 | 29,318 | 29,836 | 31,697 | 31,368 | 31,073 | 29,536 | 29,109 | 28,511 | 25,764 | 27,525 | 6.8% |
| Crops for stockfeeding | | | | | | | | | | | | |
| Turnips/swedes | 7,314 | 6,486 | 5,540 | 5,123 | 4,888 | 4,406 | 4,350 | 4,106 | 4,169 | 3,959 | 4,099 | 3.5% |
| Kale/cabbage | 3,022 | 2,887 | 2,780 | 2,319 | 2,289 | 1,729 | 1,982 | 1,802 | 1,814 | 2,084 | 2,035 | -2.3% |
| Maize | 909 | 1,180 | 1,214 | 1,819 | 2,235 | 2,386 | 1,913 | 1,406 | 1,319 | 1,396 | 763 | -45.4% |
| Rape | 3,188 | 2,944 | 2,710 | 2,657 | 2,315 | 1,917 | 2,186 | 2,102 | 2,025 | 2,390 | 2,011 | -15.8% |
| Fodder beet | 350 | 417 | 577 | 667 | 630 | 594 | 584 | 465 | 392 | 487 | 437 | -10.1% |
| Lupins | 581 | 410 | 398 | 509 | 284 | 199 | 140 | 104 | 114 | 86 | 43 | -50.8% |
| Other crops | 10,773 | 10,399 | 9,387 | 9,302 | 10,396 | 8,759 | 8,668 | 9,106 | 8,742 | 7,441 | 7,073 | -4.9% |
| Total crops for stockfeeding | 26,137 | 24,722 | 22,605 | 22,395 | 23,037 | 19,989 | 19,823 | 19,091 | 18,574 | 17,843 | 16,460 | -7.8% |
| Vegetables for human consumption | 11,314 | 11,778 | 12,267 | 16,012 | 16,479 | 15,246 | 15,430 | 15,902 | 16,262 | 16,672 | 18,168 | 9.0% |
| Orchard fruit | 39 | 45 | 47 | 37 | 49 | 67 | 69 | 86 | 89 | 111 | 98 | -11.1% |
| Soft fruit | 1,764 | 1,844 | 1,889 | 2,140 | 2,028 | 1,981 | 1,734 | 1,769 | 1,746 | 1,809 | 1,878 | 3.8% |
| Other crops ⁽²⁾ | 9,088 | 9,675 | 8,358 | 7,496 | 7,690 | 8,990 | 8,011 | 8,302 | 8,877 | 11,447 | 8,507 | -25.7% |

⁽¹⁾ From 2009, data on land use has been obtained from the Single Application Form (SAF) for holdings claiming Basic Payment Scheme entitlements (previously Single Farm Payments).

⁽²⁾ Rye area (3,725 ha) removed from 'Other crops' in 2016. See Table 1a.

b break in time series

[:] not available

Table 1c. Agricultural area in hectares, 2006 to 2016

| | | | | b Step char | nge - use o | of SAF Data | a | | | | | Percentage change between |
|------------------------------------|-----------|-----------|-----------|---------------------|-------------|-------------|-----------|-----------|-----------|--------------------|--------------------|---------------------------|
| | 2006 | 2007 | 2008 | 2009 ⁽¹⁾ | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 ⁽⁵ | ⁵⁾ 2016 | 2015 & 2016 |
| Fallow (2) | 17,724 | 15,085 | 14,330 | 22,166 | 21,934 | 15,055 | 15,478 | 15,831 | 11,910 | 33,110 | 43,008 | 29.9% |
| Fallow - under 5 years | : | : | : | : | 18,798 | 10,988 | 11,306 | 12,955 | 7,447 | 30,061 | 40,217 | 33.8% |
| Fallow - 5th year & over | : | : | : | : | 3,136 | 4,068 | 4,171 | 2,875 | 4,463 | 3,049 | 2,791 | -8.5% |
| Set-aside (3)(4) | 67,549 | 62,433 | 17,815 | 584 | z | z | z | z | z | z | Z | z |
| Total crops, fallow, and set-aside | 600,352 | 600,667 | 602,386 | 586,609 | 571,895 | 582,968 | 588,873 | 586,761 | 589,017 | 592,698 | 582,243 | -1.8% |
| Grass ⁽⁵⁾ | | | | | | | | | | b | | |
| Grass - under 5 years | 321,476 | 316,026 | 300,838 | 415,531 | 422,623 | 411,179 | 428,538 | 439,061 | 425,742 | 212,964 | 210,080 | -1.4% |
| Grass - 5th year & over | 922,100 | 919,123 | 917,738 | 945,298 | 954,646 | 946,372 | 896,649 | 882,165 | 882,387 | 1,127,964 | 1,117,854 | -0.9% |
| Total grass | 1,243,576 | 1,235,149 | 1,218,576 | 1,360,828 | 1,377,268 | 1,357,551 | 1,325,187 | 1,321,226 | 1,308,129 | 1,340,928 | 1,327,934 | -1.0% |
| Total crops and grass | 1,843,929 | 1,835,816 | 1,820,963 | 1,947,438 | 1,949,163 | 1,940,519 | 1,914,059 | 1,907,987 | 1,897,146 | 1,933,625 | 1,910,177 | -1.2% |
| Rough grazing | 3,441,133 | 3,407,194 | 3,434,016 | 3,217,955 | 3,192,860 | 3,119,241 | 3,080,483 | 3,064,184 | 3,056,855 | 2,949,100 | 3,084,581 | 4.6% |
| Woodland | 249,293 | 279,851 | 317,341 | 350,836 | 399,805 | 426,101 | 445,425 | 466,759 | 479,359 | 524,026 | 502,399 | -4.1% |
| Other land | 80,395 | 74,524 | 74,585 | 68,689 | 101,563 | 139,298 | 164,147 | 165,078 | 162,607 | 169,668 | 154,995 | -8.6% |
| Total sole right agricultural area | 5,614,750 | 5,597,386 | 5,646,906 | 5,584,918 | 5,643,391 | 5,625,159 | 5,604,114 | 5,604,008 | 5,595,967 | 5,576,420 | 5,652,152 | 1.4% |
| Common grazings | 595,334 | 594,440 | 593,504 | 591,901 | 583,728 | 583,331 | 583,686 | 583,729 | 584,263 | 584,247 | 584,225 | 0.0% |
| | | | | | | | | | | | | |

⁽¹⁾ From 2009, data on land use has been obtained from the Single Application Form (SAF) for holdings claiming Basic Payment Scheme entitlements (previously Single Farm Payments)

⁽²⁾ Information on land that has been fallow for more than five years and less than 5 years was collected for the first time in 2010

⁽³⁾ Set-aside entitlements under the Single Farm Payment Scheme ceased in 2009.

⁽⁴⁾ Note that some crop areas on land attracting set-aside entitlements under the Single Farm Payment Scheme in 2008 may not have been reported on the June Agricultural Census. Conversely, the set-aside estimate could include some land used for non-industrial arable, forage and protein crops.

⁽⁵⁾ Change in definitions of grass used in June Agricultural Census to "Rotational grass under 5 years" and "Permanent grassland"

b break in time series

[:] not available - question was not previously asked on the June Agricultural Census

z not applicable

Table 2a. Area of vegetables for human consumption, bulbs & soft fruit grown in the open 2006 to 2016

| 3 2009 ⁽¹⁾ 3 6,296 5 899 3 2,050 3 1,315 5 156 6 2,488 5 2,807 | 6,549 1,011 1,878 1,328 235 2,868 2,611 | 6,276 996 1,614 1,276 265 2,463 2,355 | 6,553 1,193 1,595 1,170 167 2,533 | 6,559 1,153 1,644 1,325 152 2,836 | 6,922 1,018 1,516 1,304 186 3,100 | 7,029 1,469 1,479 1,513 218 2,877 | 7,540 1,789 1,491 1,575 309 3,252 | 7.3% 21.8% 0.8% 4.1% 41.2% 13.0% |
|---|---|---|---|---|---|--|---|--|
| 6,296 899 3 2,050 3 1,315 6 156 2,488 | 6,549 1,011 1,878 1,328 235 2,868 2,611 | 6,276 996 1,614 1,276 265 2,463 | 6,553 1,193 1,595 1,170 167 2,533 | 6,559 1,153 1,644 1,325 152 | 6,922 1,018 1,516 1,304 186 | 7,029 1,469 1,479 1,513 218 | 7,540 1,789 1,491 1,575 309 | 7.3% 21.8% 0.8% 4.1% 41.2% |
| 899 2,050 3 1,315 5 156 2,488 | 1,011 1,878 1,328 235 2,868 2,611 | 996 1,614 1,276 265 2,463 | 1,193 1,595 1,170 167 2,533 | 1,153 1,644 1,325 152 | 1,018 1,516 1,304 186 | 1,469 1,479 1,513 218 | 1,789 1,491 1,575 309 | 21.8% 0.8% 4.1% 41.2% |
| 899 2,050 3 1,315 5 156 2,488 | 1,011 1,878 1,328 235 2,868 2,611 | 996 1,614 1,276 265 2,463 | 1,193 1,595 1,170 167 2,533 | 1,153 1,644 1,325 152 | 1,018 1,516 1,304 186 | 1,469 1,479 1,513 218 | 1,789 1,491 1,575 309 | 21.8% 0.8% 4.1% 41.2% |
| 2,050 3 1,315 6 156 2,488 | 1,878 1,328 235 2,868 2,611 | 1,614 1,276 265 2,463 | 1,595 1,170 167 2,533 | 1,644 1,325 152 | 1,516 1,304 186 | 1,479 1,513 218 | 1,491 1,575 309 | 0.8% 4.1% 41.2% |
| 3 1,315 5 156 3 2,488 | 1,328 235 2,868 2,611 | 1,276 265 2,463 | 1,170 167 2,533 | 1,325 152 | 1,304 186 | 1,513 218 | 1,575 309 | 4.1% 41.2% |
| 5 156 3 2,488 | 235 2,868 2,611 | 265 2,463 | 167 2,533 | 152 | 186 | 218 | 309 | 41.2% |
| 2,488 | 2,868 2,611 | 2,463 | 2,533 | | | | | |
| | 2,611 | • | , | 2,836 | 3,100 | 2,877 | 3,252 | 13.0% |
| 2,807 | | 2.355 | 2 240 | | | | | . 5.070 |
| | | , | 2,219 | 2,233 | 2,217 | 2,086 | 2,211 | 6.0% |
| 7 16,012 | 16,479 | 15,246 | 15,430 | 15,902 | 16,262 | 16,672 | 18,168 | 9.0% |
| 7 1,048 | 1,014 | 1,037 | 1,174 | 1,185 | 1,276 | 946 | 942 | -0.5% |
| | | | | | | | | |
| 946 | 931 | 783 | 186 | 141 | 95 | 23 | 73 | 217.3% |
| 577 | 540 | 460 | 205 | 185 | 123 | 148 | 128 | -13.7% |
| : : | : | : | : | : | 18 | 35 | 18 | -49.9% |
| 502 | 443 | 423 | 417 | 458 | 432 | 391 | 386 | -1.3% |
| 11 | 1,913 | 1,666 | 808 | 783 | 668 | 597 | 604 | 1.2% |
| 14 | 14 577 : : | 577 540 : : : : 04 502 443 | 44 577 540 460 : : : : 04 502 443 423 | 44 577 540 460 205 : : : : : 04 502 443 423 417 | 44 577 540 460 205 185 : : : : : : 04 502 443 423 417 458 | 44 577 540 460 205 185 123 : : : : : 18 04 502 443 423 417 458 432 | 44 577 540 460 205 185 123 148 : : : : : 18 35 04 502 443 423 417 458 432 391 | 44 577 540 460 205 185 123 148 128 : : : : : 18 35 18 04 502 443 423 417 458 432 391 386 |

⁽¹⁾ From 2009, data on land use has been obtained from the Single Application Form (SAF) for holdings claiming Basic Payment Scheme entitlements (previously Single Farm Payments). This has been combined with land use data from all other holdings collected through June Census forms, to generate overall results.

⁽²⁾ From 2011 onwards, areas of strawberries and raspberries include areas grown under glass as well as areas grown in the open field. Figures prior to 2010 only include areas grown in the open field

b break in time series

[:] not available - question wasn't previously asked on the June Agricultural Census (blueberries were included in other fruit until 2014)

z not applicable

Table 2b. Area of crops grown under cover and total soft fruit 2006 to 2016

| | | | | b Step o | hange - | use of S | AF Data | | | | | Percentage |
|--|------------|------------|------------|---------------------|------------|--------------------|-------------------|------------|------------|------------|------------|-----------------------------|
| | 2006 | 2007 | 2008 | 2009 ⁽¹⁾ | 2010 | 2011 ⁽² | ⁾ 2012 | 2013 | 2014 | 2015 | ch 2016 | ange between 2015 & 2016 |
| Glasshouses and walk-in plastic structures | | | | | | | | | | | | |
| Walk in plastic structures | 80 | 104 | 70 | 150 | 158 | 344 | 1,000 | 1,004 | 1,078 | 1,233 | 1,295 | 5.0% |
| Glass clad structures | 30 | 24 | 28 | 29 | 28 | 31 | 39 | 34 | 42 | 38 | 37 | -1.2% |
| Total plastic and glass clad structures | 110 | 128 | 98 | 180 | 186 | 376 | 1,039 | 1,038 | 1,121 | 1,271 | 1,332 | 4.8% |
| Area of crops grown under cover: | | | | | | | | | | | | |
| Tomatoes | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | -29.5% |
| Strawberries | : | : | : | : | : | 218 | 699 | 771 | 818 | 916 | 920 | 0.4% |
| Raspberries | : | : | : | : | : | 54 | 186 | 175 | 188 | 203 | 199 | -2.0% |
| Blueberries | : | : | : | : | : | : | : | : | 27 | 85 | 115 | 35.2% |
| Other fruit | 55 | 55 | 20 | 113 | 112 | 40 | 38 | 36 | 42 | 5 | 39 | 669.6% |
| Vegetables | 2 | 8 | 12 | 11 | 10 | 10 | 11 | 12 | 9 | 9 | 10 | 8.7% |
| Bedding and pot plants | 15 | 15 | 19 | 20 | 20 | 22 | 23 | 17 | 16 | 15 | 14 | -5.3% |
| Hardy Nursery Stock | 8 | 14 | 14 | 13 | 15 | 12 | 13 | 15 | 14 | 16 | 12 | -25.1% |
| Unused area | : | : | : | : | : | : | : | : | : | 20 | 23 | 11.9% |
| Cott fruit group in one and under cours | | | | | | | | | | | | |
| Soft fruit grown in open and under cover | 700 | 000 | 040 | 0.40 | 004 | 4 004 | 005 | 044 | 040 | 000 | 000 | F 70/ |
| Strawberries ⁽²⁾ | 769 | 809 | 919 544 | 946 | 931 540 | 1,001 | 885 | 911 | 913 311 | 939 | 993 326 | 5.7% -7.0% |
| Raspberries ⁽²⁾ | 426 396 | 477 363 | 269 | 577 312 | 340 311 | 514 282 | 391 276 | 361 295 | 308 | 351 314 | 326 302 | -7.0% -3.8% |
| Blackcurrants Blueberries | 390 | 303 | | 312 | 311 | | 2/6 | 295 | 306 45 | | | -3.6% 10.3% |
| | : | : | : | : | : | : | : | : | | 120 | 132 | |
| Tomatoes | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 2 122 | -29.5% |
| Other fruit | 170 | 192 | 155 | 302 | 244 | 180 | 180 | 198 | 166 | 81 | | 49.6% |
| Total soft fruit | 1,764 | 1,844 | 1,889 | 2,140 | 2,028 | 1,981 | 1,734 | 1,769 | 1,746 | 1,809 | 1,878 | 3.8% |

⁽¹⁾ From 2009, data on land use has been obtained from the Single Application Form (SAF) for holdings claiming Basic Payment Scheme entitlements (previously Single Farm Payments). This has been combined with land use data from all other holdings collected through June Census forms, to generate overall results.

⁽²⁾ From 2011 onwards, areas of strawberries and raspberries include areas grown under glass as well as areas grown in the open field. Figures prior to 2010 only include areas grown in the open field

b break in time series

[:] not available - question was not asked previously on the June Agricultural Census (blueberries were included in other fruit)

Table 3. Number of cattle, 2006 to 2016: Data obtained from Cattle Tracing Scheme

| | | | | | | | | | | | | Percentage change between |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------------------------|
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2015 & 2016 |
| Female Dairy Cattle | | | | | | - | - | | - | | | |
| Female dairy cattle aged 1-2 | 48,500 | 47,056 | 46,663 | 47,242 | 50,747 | 51,632 | 52,564 | 54,888 | 55,810 | 55,290 | 59,066 | 6.8% |
| Female dairy cattle aged 2 and over - with offspring | 182,654 | 181,317 | 174,889 | 168,833 | 167,623 | 164,018 | 166,781 | 165,672 | 169,716 | 175,734 | 175,194 | -0.3% |
| Female dairy cattle aged 2 and over - without offspring | 57,449 | 51,764 | 50,987 | 49,429 | 47,613 | 49,438 | 46,651 | 45,313 | 48,760 | 46,997 | 42,161 | -10.3% |
| Total Female Dairy Cattle | 288,603 | 280,137 | 272,539 | 265,504 | 265,983 | 265,088 | 265,996 | 265,873 | 274,286 | 278,021 | 276,421 | -0.6% |
| Female Beef Cattle | | | | | | | | | | | | |
| Female beef cattle aged 1-2 | 224,455 | 222,891 | 214,273 | 213,025 | 204,043 | 199,840 | 200,005 | 195,113 | 190,487 | 190,065 | 193,436 | 1.8% |
| Female beef cattle aged 2 and over - with offspring | 495,016 | 483,389 | 472,554 | 458,168 | 468,413 | 471,281 | 461,684 | 446,939 | 436,526 | 436,766 | 436,640 | 0.0% |
| Female beef cattle aged 2 and over - without offspring | 88,687 | 89,637 | 89,733 | 90,524 | 96,156 | 85,204 | 80,669 | 83,928 | 86,256 | 82,714 | 80,961 | -2.1% |
| Total Female Beef Cattle | 808,158 | 795,917 | 776,560 | 761,717 | 768,612 | 756,325 | 742,358 | 725,980 | 713,269 | 709,545 | 711,037 | 0.2% |
| Male Cattle | | | | | | | | | | | | |
| Male cattle aged 1-2 | 233,521 | 228,419 | 218,918 | 217,114 | 214,904 | 210,937 | 208,971 | 204,499 | 201,395 | 200,328 | 203,292 | 1.5% |
| Male cattle aged 2 and over | 78,388 | 80,090 | 75,986 | 75,580 | 79,962 | 69,465 | 68,245 | 69,838 | 77,770 | 74,461 | 69,014 | -7.3% |
| Total Male Cattle | 311,909 | 308,509 | 294,904 | 292,694 | 294,866 | 280,402 | 277,216 | 274,337 | 279,165 | 274,789 | 272,306 | -0.9% |
| Calves | | | | | | | | | | | | |
| Female dairy cattle under 1 | 48,133 | 47,868 | 48,365 | 52,146 | 52,736 | 53,791 | 56,056 | 56,953 | 57,054 | 60,706 | 59,320 | -2.3% |
| Female beef cattle under 1 | 255,647 | 251,957 | 245,423 | 230,487 | 230,110 | 232,905 | 229,360 | 217,229 | 214,818 | 221,166 | 222,708 | 0.7% |
| Male cattle under 1 | 286,526 | 280,500 | 272,590 | 266,511 | 271,618 | 270,291 | 269,133 | 256,950 | 254,764 | 261,759 | 262,437 | 0.3% |
| Total Calves | 590,306 | 580,325 | 566,378 | 549,144 | 554,464 | 556,987 | 554,549 | 531,132 | 526,636 | 543,631 | 544,465 | 0.2% |
| Total Cattle (CTS) | 1,998,976 | 1,964,888 | 1,910,381 | 1,869,059 | 1,883,925 | 1,858,802 | 1,840,119 | 1,797,322 | 1,793,356 | 1,805,986 | 1,804,229 | -0.1% |

Table 4. Number of sheep, 2006 to 2016

| | | | | | | | | | | | | Percentage |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|
| | | | | | | | | | | | (| change between |
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2015 & 2016 |
| Ewes used for breeding in previous season | 3,028,595 | 2,919,571 | 2,778,503 | 2,708,019 | 2,645,139 | 2,641,664 | 2,623,656 | 2,616,268 | 2,604,185 | 2,588,174 | 2,618,341 | 1.2% |
| Rams to be used for service | 96,944 | 95,354 | 91,346 | 87,675 | 86,947 | 87,324 | 86,694 | 86,904 | 86,807 | 87,121 | 89,507 | 2.7% |
| Other sheep 1 year and over | | | | | | | | | | | | |
| For breeding | 725,379 | 712,079 | 674,356 | 643,844 | 664,115 | 660,511 | 666,114 | 657,831 | 631,185 | 697,419 | 698,335 | 0.1% |
| Other | 84,020 | 93,934 | 82,491 | 82,048 | 89,199 | 85,554 | 87,668 | 104,711 | 99,935 | 99,002 | 99,869 | 0.9% |
| Total other sheep 1 year and over | 809,399 | 806,013 | 756,847 | 725,892 | 753,314 | 746,065 | 753,782 | 762,542 | 731,120 | 796,421 | 798,204 | 0.2% |
| Lambs | 3,692,988 | 3,677,279 | 3,477,992 | 3,399,841 | 3,269,391 | 3,326,133 | 3,271,842 | 3,105,263 | 3,270,509 | 3,229,660 | 3,320,064 | 2.8% |
| Total sheep | 7,627,926 | 7,498,217 | 7,104,688 | 6,921,427 | 6,754,791 | 6,801,186 | 6,735,974 | 6,570,977 | 6,692,621 | 6,701,376 | 6,826,116 | 1.9% |

Table 5. Number of pigs, 2006 to 2016

| | | | | | | | | | | | | Percentage |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| | | | | | | | | | | | ch | ange between |
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2015 & 2016 |
| Breeding herd | | | | | | | | | | | | |
| Sows in pig | 31,026 | 30,114 | 26,738 | 24,026 | 25,620 | 24,179 | 20,712 | 19,064 | 20,690 | 21,001 | 21,778 | 3.7% |
| Gilts in pig | 4,529 | 3,830 | 3,530 | 3,069 | 5,681 | 5,253 | 5,376 | 5,459 | 4,568 | 4,933 | 4,432 | -10.2% |
| Other sows | 6,252 | 6,231 | 6,671 | 6,150 | 7,625 | 6,906 | 5,793 | 4,261 | 4,970 | 4,900 | 4,748 | -3.1% |
| Total breeding herd | 41,807 | 40,175 | 36,939 | 33,245 | 38,926 | 36,338 | 31,881 | 28,784 | 30,228 | 30,834 | 30,958 | 0.4% |
| Barren sows for fattening | 820 | 762 | 709 | 495 | 552 | 735 | 941 | 668 | 610 | 767 | 708 | -7.7% |
| Gilts 50 kg & over to be used for breeding | 6,322 | 6,136 | 3,883 | 5,478 | 6,415 | 5,163 | 5,265 | 5,418 | 5,007 | 6,783 | 4,239 | -37.5% |
| Boars | 1,409 | 1,352 | 1,278 | 1,196 | 1,506 | 1,506 | 1,308 | 1,141 | 923 | 856 | 763 | -10.9% |
| Other pigs | | | | | | | | | | | | |
| 80 kg liveweight and over | 66,941 | 61,600 | 64,066 | 60,707 | 64,002 | 66,082 | 55,173 | 46,353 | 53,617 | 47,401 | 52,516 | 10.8% |
| 50 kg and under 80 kg liveweight | 95,156 | 87,999 | 89,676 | 82,868 | 86,883 | 73,595 | 70,726 | 60,792 | 60,528 | 64,451 | 68,725 | 6.6% |
| 20 kg and under 50 kg liveweight | 127,210 | 134,798 | 118,760 | 99,201 | 101,767 | 95,707 | 100,088 | 77,627 | 76,781 | 78,924 | 80,307 | 1.8% |
| Under 20 kg liveweight | 124,060 | 123,847 | 120,592 | 112,856 | 110,651 | 110,869 | 98,057 | 87,053 | 88,604 | 87,732 | 91,990 | 4.9% |
| Total Other pigs | 413,367 | 408,244 | 393,094 | 355,632 | 363,303 | 346,253 | 324,044 | 271,825 | 279,530 | 278,508 | 293,538 | 5.4% |
| Total pigs | 463,725 | 456,669 | 435,903 | 396,046 | 410,702 | 389,995 | 363,439 | 307,836 | 316,298 | 317,748 | 330,206 | 3.9% |

Table 6. Number of poultry, 2006 to 2016

| | | | | | | | | | | | | Percentage |
|--------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|
| | | | | | | | | | | | ch | ange betweer |
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2015 & 2016 |
| Fowls for producing eggs | | | | | | | | | | | | |
| Pullets and hens in the laying flock | 2,735,455 | 2,919,810 | 2,953,144 | 3,066,853 | 3,677,229 | 3,746,067 | 3,082,613 | 3,539,396 | 3,824,321 | 4,369,578 | 4,645,964 | 6.3% |
| Pullets being reared for laying | 865,257 | 1,237,748 | 1,035,966 | 869,153 | 893,387 | 1,289,354 | 1,379,620 | 1,239,825 | 1,885,032 | 1,740,903 | 1,680,240 | -3.5% |
| Total fowls for producing eggs | 3,600,712 | 4,157,558 | 3,989,110 | 3,936,006 | 4,570,616 | 5,035,421 | 4,462,233 | 4,779,221 | 5,709,353 | 6,110,481 | 6,326,204 | 3.5% |
| Fowls for breeding | | | | | | | | | | | | |
| Breeding hens | 1,258,088 | 1,199,836 | 1,166,551 | 1,105,064 | 1,073,256 | 1,218,937 | 947,138 | 1,083,481 | 975,196 | 1,061,091 | 1,060,351 | -0.1% |
| Cocks | 109,883 | 116,962 | 118,417 | 120,462 | 100,506 | 124,453 | 107,187 | 127,472 | 136,926 | 128,092 | 132,073 | 3.1% |
| Total fowls for breeding | 1,367,971 | 1,316,798 | 1,284,968 | 1,225,526 | 1,173,762 | 1,343,390 | 1,054,325 | 1,210,953 | 1,112,122 | 1,189,183 | 1,192,424 | 0.3% |
| Broilers and other table birds | 8,561,905 | 8,584,991 | 8,471,892 | 8,088,820 | 8,755,751 | 8,077,846 | 9,074,234 | 8,086,193 | 7,804,746 | 5,669,826 | 6,513,194 | 14.9% |
| Turkeys | 20,212 | 16,492 | 18,300 | 14,210 | 10,533 | 9,996 | 12,472 | 12,259 | 11,693 | 10,488 | 10,312 | -1.7% |
| Other poultry | 48,992 | 53,115 | 51,688 | 55,006 | 56,591 | 59,753 | 90,740 | 95,389 | 104,182 | 75,190 | 72,614 | -3.4% |
| Total poultry | 13,599,792 | 14,128,954 | 13,815,958 | 13,319,568 | 14,567,253 | 14,526,406 | 14,694,004 | 14,184,015 | 14,742,096 | 13,055,168 | 14,114,748 | 8.1% |

Table 7. Number of other livestock, 2006 to 2016

| | | | | | | | | | | | | Percentage |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|
| | | | | | | | | | | | ch | nange between |
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2015 & 2016 |
| Deer | 6,500 | 6,221 | 6,213 | 5,885 | 6,117 | 5,977 | 6,126 | 6,274 | 7,007 | 7,236 | 7,005 | -3.2% |
| Horses | | | | | | | | | | | | |
| For agricultural or horticultural use | 814 | 839 | 724 | 696 | 719 | 768 | 860 | 942 | 950 | 1,006 | 1,325 | 31.7% |
| Non-agricultural horses | 30,400 | 31,736 | 31,711 | 33,741 | 35,884 | 36,442 | 36,621 | 36,412 | 36,043 | 35,402 | 34,394 | -2.8% |
| Total horses | 31,214 | 32,575 | 32,435 | 34,437 | 36,603 | 37,210 | 37,481 | 37,354 | 36,993 | 36,408 | 35,719 | -1.9% |
| Donkeys | : | : | : | : | : | : | : | : | : | 1,265 | 1,447 | 14.4% |
| Goats | 4,521 | 4,184 | 4,182 | 3,852 | 3,695 | 3,765 | 3,783 | 3,966 | 4,491 | 4,751 | 4,614 | -2.9% |
| Camelids ⁽¹⁾ | : | : | : | : | 1,311 | 1,241 | 1,538 | 1,403 | 1,792 | 1,778 | 1,779 | 0.1% |
| Beehives ⁽²⁾ | : | : | : | : | : | : | : | : | 4,421 | 4,901 | 4,855 | -0.9% |

⁽¹⁾ Revisions have been made to camelids figures for 2010-13 to include estimates for holdings not returning a census since 2010. Questions on camelid numbers were introduced to the June Agricultural Census in 2010.

⁽²⁾ A question on beehives was introduced to the June Agricultural Census in 2014.

[:] not available - question was not previously asked on the June Agricultural Census

Table 8a. Number of employees, 2006 to 2016

| | | | | | | | | | | | | | Percentage |
|-------------|---|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|-------------------------------|
| | | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | change between 2015 & 2016 |
| Regular ful | II-time staff | | | | | | | | | | | | |
| Males : | Hired | 7,751 | 7,418 | 7,103 | 7,154 | 7,836 | 7,524 | 7,571 | 7,517 | 7,305 | 7,171 | 7,144 | -0.4% |
| | Family | 2,203 | 2,126 | 2,020 | 1,971 | 2,134 | 1,919 | 1,919 | 1,985 | 1,880 | 1,896 | 1,852 | -2.3% |
| | Partners | 2,134 | 2,158 | 2,137 | 2,222 | 2,432 | 2,378 | 2,376 | 2,344 | 2,357 | 2,462 | 2,328 | -5.4% |
| | Total | 12,088 | 11,702 | 11,260 | 11,347 | 12,402 | 11,821 | 11,866 | 11,846 | 11,542 | 11,529 | 11,324 | -1.8% |
| Females: | Hired | 844 | 983 | 883 | 905 | 1,060 | 1,021 | 983 | 1,030 | 1,025 | 1,017 | 1,005 | -1.2% |
| | Family | 325 | 344 | 305 | 278 | 399 | 316 | 311 | 331 | 342 | 360 | 356 | -1.1% |
| | Partners | 243 | 240 | 240 | 236 | 375 | 311 | 327 | 332 | 324 | 392 | 408 | 4.1% |
| | Total | 1,412 | 1,567 | 1,428 | 1,419 | 1,834 | 1,648 | 1,621 | 1,693 | 1,691 | 1,769 | 1,769 | 0.0% |
| Regular ful | II-time staff total | 13,500 | 13,269 | 12,688 | 12,766 | 14,236 | 13,469 | 13,487 | 13,539 | 13,233 | 13,298 | 13,093 | -1.5% |
| Regular pa | art-time staff | | | | | | | | | | | | |
| Males: | Hired | 2,237 | 2,418 | 2,141 | 2,144 | 2,072 | 2,156 | 2,332 | 2,212 | 2,318 | 2,215 | 2,118 | -4.4% |
| | Family | 1,891 | 1,869 | 1,770 | 1,890 | 1,584 | 1,726 | 1,798 | 1,820 | 1,816 | 1,694 | 1,829 | 8.0% |
| | Partners | 578 | 556 | 528 | 598 | 588 | 605 | 701 | 748 | 693 | 771 | 795 | 3.1% |
| | Total | 4,706 | 4,843 | 4,439 | 4,632 | 4,244 | 4,487 | 4,831 | 4,780 | 4,827 | 4,680 | 4,742 | 1.3% |
| Females: | Hired | 1,016 | 1,135 | 1,025 | 1,047 | 1,246 | 1,181 | 1,346 | 1,364 | 1,274 | 1,186 | 1,162 | -2.0% |
| | Family | 926 | 850 | 805 | 835 | 813 | 873 | 950 | 955 | 941 | 985 | 980 | -0.5% |
| | Partners | 244 | 234 | 262 | 268 | 282 | 293 | 365 | 360 | 373 | 402 | 432 | 7.5% |
| | Total | 2,186 | 2,219 | 2,092 | 2,150 | 2,341 | 2,347 | 2,661 | 2,679 | 2,588 | 2,573 | 2,574 | 0.0% |
| Regular pa | rt-time staff total | 6,892 | 7,062 | 6,531 | 6,782 | 6,585 | 6,834 | 7,492 | 7,459 | 7,415 | 7,253 | 7,316 | 0.9% |
| Total regul | lar full-time and part-time staff | 20,392 | 20,331 | 19,219 | 19,548 | 20,821 | 20,303 | 20,979 | 20,998 | 20,648 | 20,551 | 20,409 | -0.7% |
| Casual and | d seasonal staff | | | | | | | | | | | | |
| Males | | 3,238 | 3,826 | 3,928 | 4,258 | 3,765 | 4,471 | 4,353 | 4,539 | 4,410 | 4,667 | 4,389 | -6.0% |
| Females | | 1,294 | 1,781 | 2,021 | 2,392 | 2,133 | 2,474 | 2,139 | 2,213 | 2,256 | 2,171 | 1,961 | -9.7% |
| Total | | 4,532 | 5,607 | 5,949 | 6,650 | 5,898 | 6,945 | 6,492 | 6,752 | 6,666 | 6,838 | 6,350 | -7.1% |
| Migrant lak | oour (person working days) ⁽¹⁾ | : | | : | | 414.692 | 410.409 | 546.675 | 492.607 | 350.566 | 459.801 | 429.741 | -6.5% |

[:] not available - question was not previously asked on the June Agricultural Census

⁽¹⁾ migrant workers are workers that are not UK nationals.

Table 8b. Number of occupiers and total workforce, 2006 to 2016

| | | | | | | | | | | | | Percentage |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|
| | | | | | | | | | | | cl | hange between |
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2015 & 2016 |
| Occupiers | | | | | | | | | | | | _ |
| - full time | 12,597 | 12,180 | 11,341 | 11,612 | 11,354 | 11,570 | 11,431 | 11,272 | 11,382 | 11,203 | 10,699 | -4.5% |
| - half time or more | 6,053 | 5,963 | 5,862 | 6,049 | 6,121 | 5,962 | 6,187 | 6,002 | 6,027 | 5,932 | 5,745 | -3.2% |
| - less than half time | 23,437 | 23,071 | 22,142 | 22,780 | 23,476 | 23,017 | 23,339 | 22,354 | 21,576 | 20,834 | 20,270 | -2.7% |
| Total working occupiers | 42,087 | 41,214 | 39,345 | 40,441 | 40,951 | 40,549 | 40,957 | 39,628 | 38,985 | 37,969 | 36,714 | -3.3% |
| - Occupiers not working on the holding | : | : | : | : | : | 2,709 | 2,252 | 4,640 | 6,713 | 7,697 | 8,758 | 13.8% |
| Holdings with a working occupier | 27,803 | 27,178 | 25,886 | 26,639 | 27,842 | 27,506 | 27,581 | 26,878 | 26,289 | 25,674 | 24,736 | -3.7% |
| Total agricultural workforce ⁽¹⁾ | 67,011 | 67,152 | 64,513 | 66,639 | 67,670 | 67,797 | 68,428 | 67,378 | 66,299 | 65,358 | 63,473 | -2.9% |
| | | | | | | | | | | | | |

⁽¹⁾ This figure includes regular full time and part time staff, and casual and seasonal staff from table 8a as well as total working occupiers

[:] not available - question was not previously asked on the June Agricultural Census

Final Results of the June 2016 Agricultural Census

Table 8c. Number of occupiers by age and gender⁽¹⁾, June 2016

| | Under 41 | | 41 | 41 to 54 | | to 64 | Ov | er 64 | Total | |
|-------------------------|----------|--------|-------|----------|-------|--------|-------|--------|--------|--------|
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Occupiers | | | | | | | | | | |
| - full time | 464 | 77 | 1,764 | 403 | 1,913 | 367 | 2,198 | 475 | 6,339 | 1,322 |
| - half time or more | 195 | 135 | 547 | 484 | 566 | 409 | 900 | 448 | 2,208 | 1,476 |
| - less than half time | 482 | 496 | 1,565 | 1,643 | 1,393 | 1,415 | 1,892 | 1,533 | 5,332 | 5,087 |
| Total working occupiers | 1,142 | 708 | 3,880 | 2,530 | 3,875 | 2,194 | 4,992 | 2,456 | 13,889 | 7,888 |

⁽¹⁾ Only includes occupiers and spouses for whom we have age and gender data

Final Results of the June 2016 Agricultural Census together with June results for the years 2006 to 2015 for comparison

Table 9. Area of owned and tenanted land, 2006 to 2016⁽¹⁾

| | | | | | | | | | | | | Percentage |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------------|
| | | | | | | | | | | | ch | ange between |
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2015 & 2016 |
| Area rented | 1,634,516 | 1,616,395 | 1,594,615 | 1,535,636 | 1,483,912 | 1,453,650 | 1,382,114 | 1,365,932 | 1,326,139 | 1,319,724 | 1,319,545 | 0.0% |
| Area Owned | 3,980,234 | 3,980,991 | 4,052,291 | 4,160,158 | 4,249,175 | 4,255,907 | 4,285,772 | 4,304,459 | 4,437,900 | 4,443,906 | 4,429,108 | -0.3% |
| Total Area in Sole Occupation | 5,614,750 | 5,597,386 | 5,646,906 | 5,695,794 | 5,733,087 | 5,709,557 | 5,667,886 | 5,670,391 | 5,764,039 | 5,763,630 | 5,748,653 | -0.3% |
| Percentage of area rented | 29% | 29% | 28% | 27% | 26% | 25% | 24% | 24% | 23% | 23% | 23% | |

⁽¹⁾ From 2009, Total area in sole occupation no longer matches Total Agricultural Area in Table 1b.

This is because land use data is sourced from the Single Application Form while land tenure data is administered via census returns.

Table 10 : Holdings with rented land⁽¹⁾ 2008 to 2016

| | | | | | | b More ac | curate ten | ancy | | Percentage |
|---|--------|--------|--------|--------|--------|-------------|------------|--------|--------|---------------|
| | | | | | | data availa | able | | ch | nange between |
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2015 & 2016 |
| 1. Holdings with rented land | 17,996 | 17,875 | 16,645 | 16,627 | 16,483 | 17,257 | 16,760 | 16,691 | 16,500 | -1.1% |
| 2. Holdings with rented land and no croft | 6,770 | 6,655 | 6,376 | 6,277 | 6,144 | 6,516 | 6,636 | 6,524 | 6,498 | -0.4% |
| 3. Holdings with rented land and with croft | 11,226 | 11,220 | 10,269 | 10,350 | 10,339 | 10,741 | 10,124 | 10,167 | 10,002 | -1.6% |
| Of which: Holdings providing rented area split on census form | 5,633 | 5,974 | 6,880 | 7,886 | 7,940 | 8,218 | 7,550 | 7,767 | 7,824 | 0.7% |
| Holdings NOT providing rented area split on census form | 5,593 | 5,246 | 3,389 | 2,464 | 2,399 | 2,523 | 2,574 | 2,400 | 2,178 | -9.3% |
| Rented holdings with croft, also with 91Act , SLDT , LDTs etc. | 641 | 793 | 958 | 1,036 | 1,003 | 63 | 66 | 65 | 70 | 7.7% |
| 4. Hence % of crofts with other tenancies | 11.4% | 13.3% | 13.9% | 13.1% | 12.6% | 0.8% | 0.9% | 0.8% | 0.9% | 6.9% |
| 5. Estimated number of crofts with other tenancies (line 3 * line 4) | 1,277 | 1,489 | 1,430 | 1,360 | 1,306 | 82 | 89 | 85 | 89 | 4.7% |
| 6. Estimated number of holdings with non-croft tenancies (line 2 + line 5 | 8,047 | 8,144 | 7,806 | 7,637 | 7,450 | 6,598 | 6,725 | 6,609 | 6,587 | -0.3% |
| | | | | | | | | | | |

⁽¹⁾ rented land refers to any tenancy lasting one year or longer, including rented crofts but excluding seasonally let land

b break in time series

Table 11: Holdings by tenancy type 2008 to 2016

| | | | | | | b More a | accurate tena | ancy | c | Percentage hange between |
|---|--------|--------|--------|--------|--------|----------|---------------|-----------|-----------|--------------------------|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2015 & 2016 |
| Holdings with rented land by tenancy type: | | | | | | | | | holdings | |
| SLA ⁽¹⁾ | 98 | 94 | 112 | 119 | 124 | 156 | 149 | 74 | 74 | 0.0% |
| 91 Act tenancy | 6,441 | 6,723 | 6,497 | 6,327 | 6,100 | 5,086 | 4,993 | 4,904 | 4,731 | -3.5% |
| 91 Act Ltd Ptnship | 958 | 721 | 613 | 546 | 539 | 553 | 532 | 518 | 503 | -2.9% |
| SLDT | 509 | 526 | 506 | 539 | 551 | 648 | 834 | 945 | 1,070 | 13.2% |
| LDT | 205 | 247 | 259 | 289 | 322 | 389 | 528 | 557 | 647 | 16.2% |
| Total holdings with rented land (not crofts) ⁽²⁾ | 8,047 | 8,144 | 7,806 | 7,637 | 7,450 | 6,598 | 6,725 | 6,609 | 6,587 | -0.3% |
| Rented crofts | 11,226 | 11,220 | 10,269 | 10,350 | 10,339 | 10,741 | 10,124 | 10,167 | 10,002 | -1.6% |
| Area of rented land by tenancy type: ⁽³⁾ | | | | | | | | | hectares | |
| SLA ⁽¹⁾ | : | : | : | : | : | : | 5,295 | 3,126 | 2,889 | -7.6% |
| 91 Act tenancy | : | : | : | : | : | : | 793,558 | 796,701 | 750,125 | -5.8% |
| 91 Act Ltd Ptnship | : | : | : | : | : | : | 155,959 | 156,897 | 145,461 | -7.3% |
| SLDT | : | : | : | : | : | : | 111,624 | 110,097 | 160,343 | 45.6% |
| LDT | : | : | : | : | : | : | 104,501 | 97,923 | 111,949 | 14.3% |
| Total holdings with rented land (not crofts) | : | : | : | : | : | : | 1,170,937 | 1,164,744 | 1,170,766 | 0.5% |
| Area of rented croft | : | : | : | : | : | : | 155,182 | 154,981 | 148,779 | -4.0% |

⁽¹⁾ The apparent drop in SLA holdings between 2014 and 2015 is a result of more accurate SLA tenancy information becoming available, rather than reflecting a genuine decrease

⁽²⁾ The total number of holdings with rented land does not equal the sum of holdings with each tenancy type as a holding may hold more than one type of tenancy agreement

⁽³⁾ Prior to 2014, the area of rented land by tenancy type is incomplete. From 2014 holdings not returning tenancy data have been estimated using the same method as for estimating the number of holdings with rented land

b break in time series

[:] not available - data is incomplete

Table 12: Number and area of holdings by main farm type, total from Standard Outputs⁽¹⁾ and Standard Labour Requirements⁽²⁾, 2016

| | . rtoquii oiii | | | | |
|---------------------------|----------------|-----------|--------------------|----------------------------|--------------|
| | | | Total from | Average | |
| | | | Standard | Standard | Standard |
| | | | Outputs | Outputs per | Labour |
| Main farm type | Holdings | Hectares | (£) ⁽³⁾ | holding (£) ⁽³⁾ | Requirements |
| | | | | | _ |
| Specialist Cereals | 2,496 | 257,832 | 192,546,640 | 77,142 | 2,034 |
| General cropping | 1,738 | 254,659 | 334,045,907 | 192,201 | 4,383 |
| Specialist horticulture & | | | | | |
| permanent crops | 720 | 21,028 | 232,917,601 | 323,497 | 5,849 |
| Specialist pigs | 236 | 10,594 | 42,344,752 | 179,427 | 634 |
| Specialist poultry | 852 | 11,740 | 171,794,483 | 201,637 | 1,687 |
| Specialist dairy | 768 | 113,459 | 308,516,471 | 401,714 | 4,819 |
| LFA Cattle and sheep | 14,517 | 3,151,601 | 653,450,389 | 45,013 | 22,490 |
| Non-LFA Cattle and sheep | 2,475 | 120,822 | 121,035,293 | 48,903 | 2,763 |
| Mixed holdings | 5,225 | 284,171 | 280,809,108 | 53,743 | 5,300 |
| General cropping; forage | 21,313 | 1,368,059 | 67,140,965 | 3,150 | 1,189 |
| Unclassified | 1,556 | 58,187 | 0 | 0 | 319 |
| Total | 51,896 | 5,652,152 | 2,404,601,610 | 45,494 | 51,468 |

⁽¹⁾ Standard Outputs represent the estimated farm-gate worth (£s) of crops and animals without taking account of the costs incurred in production.

⁽²⁾ Standard Labour Requirements represent the estimated full-time equivalent (FTE) labour required to farm the crops and animals on the holding 1 Standard Labour Requirement (FTE) = 1900 hours per year.

⁽³⁾ The total amounted generated (in £) using the individual SOs on each farm type listed The individual SO coefficients for crops and livestock are listed here: www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/Publications/SOCoeffs

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