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Farming Statistics Final Land Use, Livestock Populations and Agricultural Workforce At 1 June 2017 - England

This release contains the final estimates of crop areas, livestock numbers and the agricultural workforce on commercial agricultural holdings in England on 1 June 2017. This release has been updated to include land ownership, poultry, horse, goat, farmed deer and camelid populations, and the size of the agricultural workforce. Crop areas and populations of cattle, sheep and pigs remain unchanged to those published on 14 September 2017.

Approximately 25 thousand commercial holdings were asked to complete the survey and results are based on almost 17 thousand responses, representing a response rate of 67%. Commercial holdings are those farms with a significant level of activity. A full definition can be found in the methodology section on page 17. The key results are given below.

Agricultural land use and ownership (Tables 1-2)

- The utilised agricultural area (UAA) in England increased by 0.6% between 2016 and 2017 and now stands at almost 9.1 million hectares.
- The total croppable area accounts for just over half (54%) of UAA and has increased by 1.2% to 4.9 million hectares in 2017.
- Permanent grassland accounts for an additional 41% of UAA and has remained unchanged at 3.8 million hectares.
- The area of owned land in England increased by 0.8% to just over 6.1 million hectares in 2017. Land rented in for a year or more increased by 0.7% to over 3.0 million hectares.

Crops (<u>Tables 3-6</u>)

- The total area of arable crops increased by 1.5%, and now stands at just over 3.9 million hectares in 2017. Cereals and oilseed crops account for the majority (82%) of the total arable crop area.
- The area of cereal crops increased by 1.6% to just over 2.7 million hectares in 2017. This was mainly due to a 16% increase in the area of spring sown barley which rose to 482 thousand hectares in 2017. The areas of wheat and winter barley both decreased between 2016 and 2017 falling to under 1.65 million hectares and 361 thousand hectares respectively.
- The area of oilseed crops decreased by 3.7%, falling from 571 thousand hectares in 2016 to 550 thousand hectares in 2017. This was mainly due to a 3.6% decrease in the area of winter oilseed rape, which accounts for the majority (98%) of all oilseed crops.

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 The area of horticultural crops accounts for 140 thousand hectares of land and has increased by 2.9% in 2017. This was driven mainly by the 3.3% increase in the area used to grow vegetables and salad for human consumption, which accounts for 68% of the total horticultural area.

Livestock (Tables 7-11)

- The total number of cattle and calves in England is 5.4 million in June 2017, showing almost no change since 2016. The total breeding herd remained at almost 1.9 million in 2017 with little change to the beef or dairy breeding herds.
- In 2017 the total number of pigs in England increased by 1.5% to almost 4.0 million animals.
 The increase was mainly driven by the rise in the number of fattening pigs, up 1.7% to 3.6
 million in 2017. The number of breeding pigs remained almost unchanged in 2017 at 416
 thousand animals. When considered alongside the confidence intervals displayed in the results
 table these changes are not statistically significant.
- The total number of sheep and lambs increased by 3.1%, from almost 15.3 million in 2016 to just under 15.8 million in 2017. The female breeding flock increased by 3.8% to nearly 7.4 million and the number of lambs increased by 2.6% to 8.0 million.
- The total number of breeding and laying fowl in England increased by 1.6% between 2016 and 2017 to 33.7 million. The number of table chickens (broilers) also saw an increase in 2017, rising by 6.2% to 90.6 million.
- In 2017, the number of horses on commercial holdings decreased by 4.0% to 170 thousand head.

Agricultural workforce (Table 12)

The total number of people working on agricultural holdings in England increased by 1.6% from 302 thousand in 2016 to 306 thousand in 2017. Farmers, business partners, directors and spouses account for over half (57%) of the total workforce and saw a small increase (1.0%) to 175 thousand people in 2017.

Survey methodology (Pages 17-18)

For information on how the survey is run and details of data analysis and accuracy of results please see the methodology section on pages 17 and 18 at the end of this release.

Other surveys and next publications due (Page 19)

Further information on the next publications due from the results of the June Agricultural Survey can be found on page 19. This includes both England and UK publications.

Defra is extremely grateful to the many farmers who complete the June Survey questionnaire each year. The support of farmers enables the Department to produce timely figures on the latest trends which are important for the Department's business and the industry's market operations.

Detailed results

Utilised agricultural area

The utilised agricultural area includes all arable and horticultural crops, uncropped arable land, land used for outdoor pigs, temporary and permanent grassland and common rough grazing. The total utilised agricultural area in England is almost 9.1 million hectares in 2017.

Area (million hectares)

Figure 1: Total utilised agricultural area at 1 June 2000 to 2017

Figure 1 shows that the utilised agricultural area in England has remained stable around the 9 million hectare mark since 2000. The small drop seen between 2008 and 2009 is a result of register improvements made ahead of the 2010 Census which removed holdings that no longer have agricultural activity.

Croppable area

The area of land available for cropping increased by 1.2%, from 4.8 million hectares in 2016 to almost 4.9 million in 2017. The croppable area consists of cereals, oilseeds, potatoes, other arable crops, horticultural crops, uncropped arable land and temporary grassland.

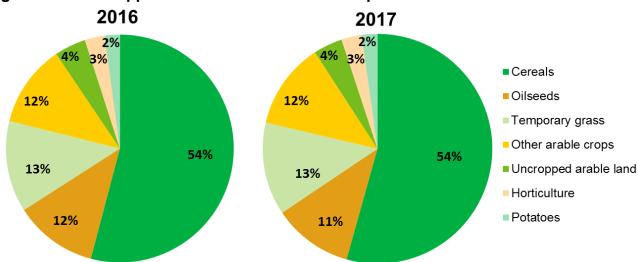


Figure 2: Total croppable area at 1 June 2017 compared to 2016

Figure 2 on the previous page shows that on the whole the proportion of croppable land used for each purpose remained similar between 2016 and 2017; however some categories did see value changes. In particular the area of uncropped arable land decreased by 7.5%, from 216 thousand hectares in 2016 to 200 thousand hectares in 2017. However it still accounts for 4% of the total croppable area.

With the exception of oilseed crops which decreased in area in 2017, all other components of the croppable area saw increases. The increases seen in cereals (1.6%), potatoes (3.9%), other arable crops (5.6%), horticultural crops (2.9%) and temporary grassland (2.0%) more than offset the decreases in oilseed crops and uncropped arable land.

Cereals and oilseeds

The total area of cereal crops in England increased by 1.6% between 2016 and 2017 to almost 2.7 million hectares. Wheat continues to be the most popular crop grown in England and accounts for 62% of the total cereal area. Historically the area of wheat has fluctuated between approximately 1.5 and 2.0 million hectares over the past 30 years (Figure 3).

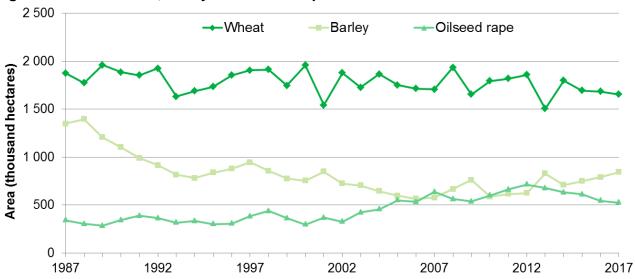


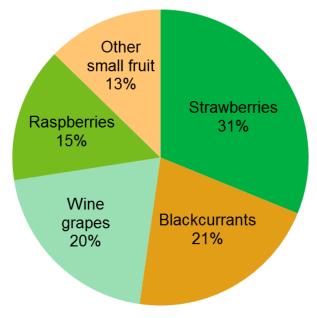
Figure 3: Area of wheat, barley and oilseed rape at 1 June 1987 to 2017

In contrast to the wheat area which has decreased in each of the past three years, barley has increased in area for the third year running. The increase in total barley area was due to a 16% increase in the spring sown barley area, which has seen an increase in popularity in recent years increasing from 53% of the total barley area in 2016 to 57% in 2017. The winter sown barley area decreased by 3.9% to 361 thousand hectares in 2017.

The total area of oilseed rape fell for the fifth year running, decreasing by 3.6% from 543 thousand hectares in 2016 to 523 thousand hectares in 2017. The decrease was due to a 3.6% reduction in the area of winter sown oilseed rape which accounts for 98% of the total oilseed rape area and now stands at 515 thousand hectares. Spring oilseed rape saw a larger proportional decrease of 5.9% in 2017. However, at 8 thousand hectares this only accounts for 2% of the total oilseed area and is the second smallest area of the spring sown crop seen in the past decade.

Fruit and vegetables

Figure 4: Breakdown of small fruit as at 1 June 2017



The total area of orchards and small fruit remained almost unchanged between 2016 and 2017 at 32 thousand hectares. Orchards account for 69% of this total and cover 22 thousand hectares in 2017, a decrease of 3.3% since 2016.

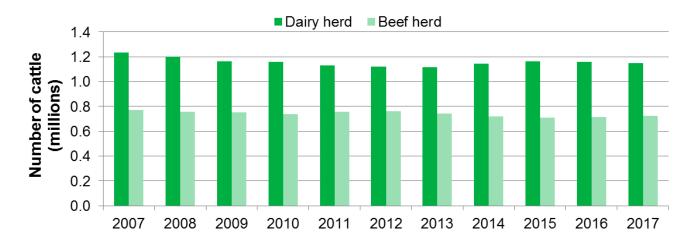
The remaining area of 9.8 thousand hectares is used to grow small fruit. This area increased by 6.5% since 2016 which offset the decrease in the orchard area. Figure 4 shows the breakdown of small fruit areas in 2017. The largest proportion of the small fruit area is used to grow strawberries (31%) with blackcurrants (21%) and wine grapes (20%) being the next most common small fruit crops.

The area used to grow vegetables for human consumption increased between 2016 and 2017, rising by 3.3% to 96 thousand hectares. The majority (67%) of this area is used to grow other vegetables and salad and this area increased by 3.0%, from 62 thousand hectares in 2016 to 64 thousand in 2017. The second largest area is vining peas which saw an increase of 6.0% from 25 thousand hectares in 2016 to 27 thousand in 2017.

Cattle

The total number of cattle and calves in England remained almost unchanged between 2016 and 2017 at 5.4 million animals. The female breeding herd continues to account for just over a third (35%) of this total.

Figure 5: Female dairy and beef herds at 1 June 2007 to 2017



The breeding herd has remained stable for the last three years at almost 1.9 million animals. The dairy herd accounts for the majority (61%) of the breeding herd and remained almost unchanged in 2017 at almost 1.2 million animals. The beef herd was also stable between 2016 and 2017, remaining at 721 thousand animals (Figure 5).

Pigs

The total number of pigs in England increased by 1.5% from 3.91 million animals in 2016 to 3.97 million in 2017. This increase was driven by a 1.7% rise in the number of fattening pigs which account for 90% of all pigs. However it is worth noting that when considered alongside the 95% confidence intervals (see table 8) these changes are not statistically significant.

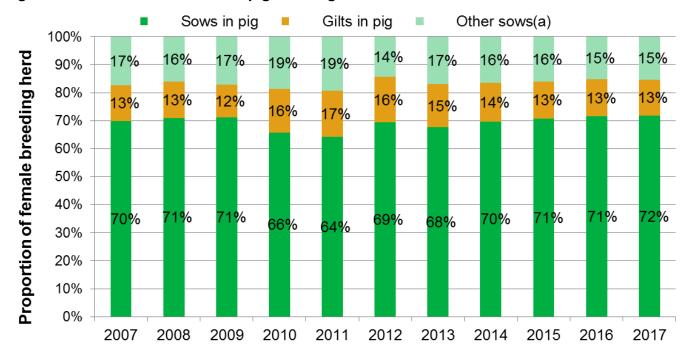


Figure 6: Breakdown of the female pig breeding herd 1 June 2007 to 2017

(a) Other sows are those either being suckled or dry sows kept for further breeding.

The female breeding herd remained almost unchanged between 2016 and 2017 at 334 thousand pigs. Figure 6 above shows how the female breeding herd is made up. Other breeding pigs were also stable at 82 thousand in 2017.

Sheep

The total number of sheep and lambs in England increased by 3.1%, from 15.3 million in 2016 to almost 15.8 million in 2017. Lambs account for just over half (51%) of all sheep and increased by 2.6% from 7.8 million in 2016 to 8.0 million in 2017. The female breeding flock account for a further 47% and increased by 3.8% to almost 7.4 million sheep in 2017.

Poultry

The number of table chickens (broilers) increased by 6.2%, from 85.3 million birds in 2016 to 90.6 million in 2017. Table chickens account for two thirds of all poultry in England and consumer demand remains strong.

The total number of breeding and laying fowl in England increased by 1.6%, from 33.2 million birds in 2016 to 33.7 million in 2017. Hens and pullets laying eggs for eating account for the majority (76%) of the breeding and laying flock and remained almost unchanged at 25.5 million in 2017.

The number of ducks, geese and turkeys in England all saw increases in 2017, rising by 13%, 6.4% and 2.7% respectively.

Other livestock

In 2017 the number of horses on commercial holdings in England decreased by 4.0% and now stands at 170 thousand animals. The number of farmed deer also decreased, falling from 21 thousand in 2016 to 20 thousand in 2017. The number of goats increased by 0.5% during the same period, rising to 84 thousand animals.

Agricultural workforce

The total number of people working in agriculture in England was 306 thousand in 2017, showing an increase of 1.6% since June 2016. Farmers, business partners, directors and spouses account for over half (57%) of the total workforce and saw a small increase (1.0%) to 175 thousand people in 2017. Salaried managers make up a much smaller proportion of the total (4%) and remained at 11 thousand people in 2017.

Regular employees and casual workers make up the remainder (39%) of the total workforce. Full time regular workers decreased by 3.7% between 2016 and 2017 and now stand at 45 thousand. Part time regular workers remained stable at 27 thousand people. As might be expected the number of casual workers in agriculture can vary greatly due to weather conditions, cropping areas, harvest timing and numerous other factors. In June 2017 the number of casual workers increased by 10% from 44 thousand people in 2016 to 48 thousand in 2017.

Results tables

Table 1: Summary of land use on commercial agricultural holdings on 1 June

Thousand hectares						
	2015	2016	2017	% change 2017-16	June 2017 confidence interval	Indicato
Utilised agricultural area ^(a)	8 912	9 006	9 061	0.6	+/- 71	/ / /
Total agricultural area	9 391	9 520	9 575	0.6	+/- 71	///
Common rough grazing (b)	399	399	399	0.0		
Total area on agricultural holdings	8 992	9 121	9 176	0.6	+/- 71	/ / /
Total croppable area	4 809	4 836	4 894	1.2	+/- 43	///
Total crops	3 984	3 993	4 054	1.5	+/- 40	111
Arable crops	3 834	3 857	3 914	1.5	+/- 39	$\checkmark\checkmark\checkmark$
Cereals	2 573	2 617	2 660	1.6	+/- 32	$\checkmark\checkmark\checkmark$
Oilseeds	629	571	550	-3.7	+/- 16	$\checkmark\checkmark\checkmark$
Potatoes	96	104	108	3.9	+/- 5	$\checkmark\checkmark\checkmark$
Other crops	535	564	596	5.6	+/- 15	$\checkmark\checkmark\checkmark$
Horticultural crops	150	136	140	2.9	+/- 7	√ ✓
Uncropped arable land (c)	179	216	200	-7.5	+/- 11	✓✓
Temporary grass under 5 years old	646	627	640	2.0	+/- 13	///
Permanent grassland (incl. rough grazing)	3 695	3 760	3 757	-0.1	+/- 55	///
Grass over 5 years old	3 231	3 282	3 279	-0.1	+/- 45	$\checkmark\checkmark\checkmark$
Sole right rough grazing (d)	464	479	479	0.0	+/- 31	$\checkmark\checkmark$
Other land on agricultural holdings	488	524	525	0.2	+/- 13	///
Woodland	348	370	369	-0.5	+/- 12	$\checkmark\checkmark\checkmark$
Land used for outdoor pigs	9	10	10	-1.9	+/- 1	\checkmark
All other non-agricultural land	131	143	146	2.1	+/- 6	$\checkmark\checkmark\checkmark$

⁽a) Includes all arable and horticultural crops, uncropped arable land, common rough grazing, temporary and permanent grassland and land used for outdoor pigs (excludes woodland and other non-agricultural land).

⁽b) This area is an estimate of total common land in England. The vast majority is eligible for grazing and claimed upon under the Basic Payment Scheme (BPS) but isn't necessarily used for grazing. The area was last revised in 2011.

⁽c) Includes all arable land not in production, including bare fallow, game strips, wild bird cover and game cover.

⁽d) Classified as mountains, hills, heathland or moorland.

Table 2: Areas of owned and rented land on commercial agricultural holdings on 1 June

Thousand hectares June 2017 % change 2015 2016 2017 confidence Indicator 2017-16 interval Land owned 5 887 6 056 6 107 +/- 48 111 8.0 Land rented in for 1 year or **///** 2 984 3 020 3 039 0.7 +/- 49 more **///** Full Agricultural Tenancies 1 444 1 407 1 396 -0.8 +/- 30 +/- 33 **///** Farm Business Tenancies 1 208 1.2 1 125 1 193 **///** Other agreements 3.9 +/- 21 415 420 436 111 Seasonally rented in land (a) 520 518 527 1.7 +/- 14 Seasonally let out land (a) √√ 383 386 401 3.8 +/- 20

⁽a) Land rented for less than 1 year, including grazing licenses.

Table 3: Arable crops on commercial agricultural holdings on 1 June

Thousand hectares

						nectares
	2015	2016	2017	% change 2017-16	June 2017 confidence interval	Indicator
Total arable crops	3 834	3 857	3 914	1.5	+/- 39	///
Cereals	2 573	2 617	2 660	1.6	+/- 32	111
Wheat	1 693	1 684	1 652	-1.9	+/- 26	$\checkmark\checkmark\checkmark$
Barley	748	791	842	6.5	+/- 17	$\checkmark\checkmark\checkmark$
winter	376	376	361	-3.9	+/- 11	$\checkmark\checkmark\checkmark$
spring	373	416	482	15.9	+/- 13	$\checkmark\checkmark\checkmark$
Oats	98	102	121	18.1	+/- 7	$\checkmark\checkmark$
Rye, mixed corn and triticale	34	40	44	12.0	+/- 5	✓
Oilseed crops	629	571	550	-3.7	+/- 16	$\checkmark\checkmark\checkmark$
Oilseed rape	611	543	523	-3.6	+/- 15	$\checkmark\checkmark\checkmark$
winter	605	534	515	-3.6	+/- 15	$\checkmark\checkmark\checkmark$
spring	6	9	8	-5.9	+/- 3	\triangle
Linseed	15	27	26	-3.3	+/- 4	\checkmark
Borage	3	1	1	-38.7	+/- 1	X
Potatoes	96	104	108	3.9	+/- 5	$\checkmark\checkmark\checkmark$
Early crop (harvested on or before 31 July)	10	10	10	-1.5	+/- 1	✓
Main crop (harvested after 31 July)	86	94	98	4.5	+/- 5	$\checkmark\checkmark\checkmark$
Other (non-horticultural) crops	535	564	596	5.6	+/- 15	///
Sugar beet (a)	90	86	111	29.5	+/- 6	$\checkmark\checkmark$
Field beans	165	173	189	8.9	+/- 9	$\checkmark\checkmark\checkmark$
Peas for harvesting dry	42	50	39	-21.6	+/- 5	\checkmark
Maize	173	182	183	0.8	+/- 8	$\checkmark\checkmark\checkmark$
- of which grain maize	8	8	8	2.2	+/- 2	
- of which fodder maize	132	122	118	-3.1	+/- 5	$\checkmark\checkmark\checkmark$
 of which maize for anaerobic digestion 	34	52	57	9.8	+/- 6	✓
Root crops, brassicas and fodder beet for stock feeding	23	25	24	-4.2	+/- 2	√ √
Leguminous forage crops	12	14	16	15.1	+/- 3	\checkmark
Other crops for stockfeeding	8	6	7	15.1	+/- 2	
All other arable crops	22	29	27	-6.1	+/- 3	\checkmark
 of which short rotation coppice 	3	3	3	1.4	+/- 1	
- of which miscanthus	7	7	7	4.4	+/- 1	\checkmark
 of which crops for aromatic or medicinal use 	4	5	2	-55.1	+/- 1	\boxtimes

⁽a) Not for stockfeeding.

Table 4: Fruit and vegetables grown in the open on commercial agricultural holdings on 1 June

Thousand hectares

	2015	2016	2017	% change 2017-16	June 2017 confidence interval	Indicato
Total fruit and vegetables	137	125	128	2.4	+/- 7	4
Orchards ^(a)	24	23	22	-3.3	+/- 1	√ √
Small fruit ^(b)	9.1	9.2	9.8	6.5	+/- 0.5	111
Strawberries	3.3	3.3	3.1	-6.4	+/- 0.2	$\checkmark\checkmark$
Raspberries	1.1	1.2	1.5	24.2	+/- 0.2	\checkmark
Blackcurrants	2.1	2.0	2.1	3.6	+/- 0.3	\checkmark
Wine grapes Other small fruit (incl.	1.8	1.8	2.0	11.1	+/- 0.2	✓
gooseberries and blackberries)	0.8	1.0	1.2	25.7	+/- 0.1	✓
egetables and salad for human consumption (c)	104	93	96	3.3	+/- 7	/ /
Vining peas for processing	28	25	27	6.0	+/- 3	\checkmark
Other peas and beans	3	3	2	-8.2	+/- 1	
Culinary plants for human consumption (incl. herbs)	4	3	3	-2.3	+/- 2	\boxtimes
All other vegetables and salad	69	62	64	3.0	+/- 6	√ √
 of which carrots 	9	8	8	-1.9	+/- 2	\checkmark
- of which onions	16	14	14	-3.5	+/- 3	\checkmark

⁽a) Includes both commercial and non-commercial orchards. Commercial orchards are those from which growers intend to sell fruit.

Table 5: Hardy nursery stock on commercial agricultural holdings on 1 June

Hectares

	2015	2016	2017	% change 2017-16	June 2017 confidence interval	Indicator
Total hardy nursery stock, bulbs and flowers	11 266	9 998	10 982	9.8	+/- 792	4 4
Christmas trees	1 897	2 137	1 980	-7.3	+/- 206	\checkmark
Perennial herbaceous plants	354	358	327	-8.5	+/- 63	\checkmark
Other hardy nursery stock	2 833	2 440	2 320	-4.9	+/- 150	$\checkmark\checkmark$
Bulbs and flowers grown in the open	6 182	5 063	6 355	25.5	+/- 747	✓

⁽b) Small fruit includes crops grown in Spanish tunnels.

⁽c) These figures relate to land usage on 1 June and are not necessarily good indicators of annual production as more than one crop may be obtained in each season; a crop may overlap two seasons, or may be planted after 1 June.

Table 6: Glasshouses and protected crops on commercial agricultural holdings on 1 June (a) (b)
Hectares

	2015	2016	2017	% change 2017-16	June 2017 confidence interval	Indicator
Total glasshouse area on 1 June	1 309	1 326	1 304	-1.7	+/- 66	√ ✓
Vegetables, salad and fruit	671	733	697	-4.9	+/- 37	$\checkmark\checkmark$
Flowers, foliage and other plants	475	471	478	1.6	+/- 46	√ ✓
Mushroom sheds	4	3	4	9.7	+/- 0.1	$\checkmark\checkmark\checkmark$
Not in use on 1 June	159	119	125	5.0	+/- 31	

⁽a) These figures relate to land usage on 1 June and are not necessarily good indicators of annual production as more than one crop may be obtained in each season; a crop may overlap two seasons, or may be planted after 1 June.

⁽b) 'Glasshouse' includes any fixed or mobile structure high enough to walk through, which is glazed or clad with film, rigid plastics or other glass substitutes. It excludes lights, low plastic tunnels, French and Spanish tunnels. These are reported as crops grown in the open (table 4).

Table 7: Cattle and calves on agricultural holdings on 1 June (a)

				Thousands
	2015	2016	2017	% change 2017-16
Total cattle and calves	5 385	5 429	5 418	-0.2
All female cattle	3 903	3 925	3 921	-0.1
Aged 2 years or more	2 295	2 274	2 265	-0.4
Total breeding herd - Beef herd - Dairy herd	1 874 713 1 162	1 877 721 1 156	1 871 721 1 150	-0.3 0.0 -0.5
Other female cattle - Beef - Dairy	421 194 227	396 190 207	394 189 205	-0.6 -0.5 -0.7
Aged between 1 and 2 years - Beef - Dairy	759 429 330	789 447 342	799 460 340	1.4 2.9 -0.6
Less than 1 year - Beef - Dairy	849 495 354	863 510 353	856 529 327	-0.8 3.8 -7.5
All male cattle Aged 2 years or more Aged between 1 and 2 years Less than 1 year	1 482 212 549 721	1 504 200 559 744	1 497 193 572 732	-0.5 -3.6 2.2 -1.6

⁽a) These figures have been sourced from the Cattle Tracing System (CTS). Confidence intervals and confidence indicators are not appropriate for this table as the data include returns from all holdings with cattle so are not subject to survey error.

Table 8: Pigs on commercial agricultural holdings on 1 June

Thousands June 2017 % change 2017 confidence Indicator 2015 2016 2017-16 interval 111 **Total pigs** 3 826 3 911 3 969 1.5 +/- 159 111 **Breeding pigs** 413 417 416 -0.1 +/- 20 Female breeding herd √√ +/- 18 328 334 334 -0.2 Sows in pig 232 239 240 0.2 +/- 15 √√ Gilts in pig 43 44 43 -2.9 +/- 8 ✓ Other sows (a) 52 51 51 0.2 +/- 6 ✓ 0.2 +/- 7 11 Other breeding pigs 85 82 82 Boars being used for 11 +/- 1 √√ 13 13 -15.4 service Gilts intended for first √√ 72 71 +/- 7 69 3.1 time breeding

3 494

3 553

111

+/- 157

1.7

Fattening pigs (incl. barren sows)

Table 9: Sheep and lambs on commercial agricultural holdings on 1 June

3 413

Thousands June 2017 % change 2017 2015 2016 confidence Indicator 2017-16 interval **Total sheep and lambs** 15 142 15 283 15 757 3.1 +/- 138 111 111 Female breeding flock 7 057 7 114 7 385 3.8 +/- 82 Ewes intended for further **///** 5 481 5 462 5 675 3.9 +/- 67 breeding Breeding ewes intended for 421 458 478 4.5 +/- 28 √√ slaughter Ewes intended for first time **///** +/- 39 1 154 1 194 1 232 3.2 breeding Other sheep and lambs 8 085 8 169 8 372 2.5 +/- 111 111 **///** Lambs under 1 years old 7 7 1 6 7 794 8 001 2.6 +/- 110 Rams 186 185 192 3.4 +/- 5 **///** √√ Other sheep 1 year and over 182 189 179 -5.3 +/- 16

⁽a) Either being suckled or dry sows being kept for further breeding.

Table 10: Poultry on commercial agricultural holdings on 1 June (a)

					Tho	ousands
	2015	2016	2017	% change 2017-16	June 2017 confidence interval	Indicator
Total poultry	125 433	128 879	134 869	4.6	+/- 4 588	///
Total breeding and laying fowl	32 608	33 201	33 748	1.6	+/- 1 335	///
Hens and pullets laying eggs for eating	25 181	25 451	25 486	0.1	+/- 1 149	$\checkmark\checkmark\checkmark$
Breeding flock	7 426	7 750	8 262	6.6	+/- 680	√ ✓
Table chickens (broilers)	82 585	85 328	90 605	6.2	+/- 4 262	/ / /
Other poultry	10 240	10 351	10 516	1.6	+/- 1 048	✓
Ducks	2 078	1 832	2 077	13.3	+/- 273	\checkmark
Geese	139	148	158	6.4	+/- 8	$\checkmark\checkmark\checkmark$
Turkeys	4 010	3 890	3 997	2.7	+/- 682	\checkmark
All other poultry	4 013	4 480	4 285	-4.4	+/- 747	✓

⁽a) Due to production cycles, subgroups within the poultry population are often volatile as the "point in time" nature of the June Survey can lead to large variations in the numbers in each category.

Table 11: All other livestock on commercial agricultural holdings on 1 June (a)

					Th	nousands
	2015	2016	2017	% change 2017-16	June 2017 confidence interval	Indicator
Total other livestock	306	302	299	-0.9	+/- 13.1	$\checkmark\checkmark\checkmark$
Goats	82	83	84	0.5	+/- 7.7	$\checkmark\checkmark$
Farmed deer	20	21	20	-1.6	+/- 6.7	
Horses	185	177	170	-4.0	+/- 6.0	$\checkmark\checkmark\checkmark$
Any livestock not recorded elsewhere (a)	19	22	26	19.3	+/- 5.6	
- of which alpacas	11	11	11	8.5	+/- 3.3	
- of which llamas	2	2	1	-15.9	+/- 0.7	×

⁽a) Includes camelids, donkeys, mules and hinnies.

Table 12: Number of people working on commercial agricultural holdings on 1 June

					٦	Thousands
	2015	2016	2017	% change 2017-16	June 2017 confidence interval	Indicator
Total people working on commercial agricultural holdings	305	302	306	1.6	+/- 3.1	/ / /
Farmers, partners, directors and spouses	174	173	175	1.0	+/- 1.6	/ / /
Full time	90	89	90	1.1	+/- 1.1	$\checkmark\checkmark\checkmark$
Part time (a)	84	84	85	0.9	+/- 1.2	$\checkmark\checkmark\checkmark$
Salaried managers	11	11	11	0.6	+/- 0.5	///
Full time	8	8	8	1.0	+/- 0.4	$\checkmark\checkmark\checkmark$
Part time (a)	3	3	3	-0.6	+/- 0.3	$\checkmark\checkmark$
Regular and casual workers	120	117	120	2.6	+/- 2.6	111
Regular workers	75	73	72	-2.1	+/- 1.9	///
Full time	47	47	45	-3.7	+/- 1.7	///
Part time (a)	28	27	27	0.7	+/- 1.0	$\checkmark\checkmark\checkmark$
Casual workers	45	44	48	10.3	+/- 1.8	///
Male	29	29	31	8.7	+/- 1.5	$\checkmark\checkmark\checkmark$
Female	16	15	17	13.4	+/- 1.0	✓✓

⁽a) Part time is defined as working less than 39 hours per week.

Survey methodology

Full details of the survey methodology are available on the website at: https://www.gov.uk/structure-of-the-agricultural-industry-survey-notes-and-guidance. A summary is given below.

The June Survey of Agriculture and Horticulture was historically a postal survey run annually. However from 2011 onwards, the survey has been run predominantly online with an option for farmers to complete a paper form if they preferred.

Approximately 25 thousand 'commercial' holdings were asked to complete the survey in 2017. Commercial holdings are defined as those with significant levels of farming activity, i.e. holdings with more than five hectares of agricultural land, one hectare of orchards, 0.5 hectares of vegetables or 0.1 hectares of protected crops, or more than 10 cows, 50 pigs, 20 sheep, 20 goats or 1,000 poultry.

Checks were carried out to ensure the sample was representative across farm size. The size of a farm is determined by its Standard Labour Requirement (SLR). In the SLR system, each livestock type and land-use has a theoretical amount of labour required each year. This value is multiplied by the land area or livestock numbers and then summed to give the SLR for the holding. The SLR represents the typical number of full time workers required on the holding.

The small farms (those with low SLRs) were sampled at a lower rate and the sampling rate increased with farm size as in table 13 below. This method minimises the burden on farmers whilst maximising the coverage. To improve the coverage of the pig and poultry sectors, a special data collection exercise was run to collect data from a central point for some of the largest companies.

Table 13: June 2017 sample design

Stratum	Description	Sampling rate (%)	Population size
1	SLR < 0.5	10%	50 057
2	SLR >= 0.5 and < 1	15%	15 585
3	SLR >= 1 and < 2	25%	15 061
4	SLR >= 2 and < 3	37%	7 992
5	SLR >= 3 and < 5	54%	7 786
6	SLR >= 5	67%	7 853
10	SLR unknown	47%	3 031
All	-	23%	107 365

The results in this statistical release are based on responses from almost 17 thousand commercial holdings, representing a response rate of 67%.

Cattle results are sourced from the Cattle Tracing System (CTS). The data include returns from all holdings with cattle so are not subject to survey error. More information on the use of this administrative data can be found on the "survey notes and guidance" web page via the following link: https://www.gov.uk/government/uploads/system/uploads/system/uploads/attachment_data/file/182225/defra-stats-foodfarm-landuselivestock-june-results-BovineRegisters.pdf.

Data analysis

The data are subject to rigorous validation checks which identify inconsistencies within the data or large year-on-year changes. Any records that have not been cleaned by the results production stage are excluded from the analysis.

Population totals are estimated for each question on the survey to account for the non-sampled and non-responding holdings. This survey uses the technique known as ratio raising, in which the trend between the sample data and base data (previous year's data) is calculated for each stratum. The calculated ratio is then applied to the previous year's population data to give England level estimates. For holdings where we do not have base data (new holdings or long-term non-responders) the sample estimates are raised according to the inverse sampling fraction.

Confidence indicators

We calculate the standard error for all our estimated figures. The standard error is a measure of the variation in the data. Typically, large estimates also have large standard errors. The standard error divided by the estimated total gives the relative standard error (RSE). This is expressed as a percentage and is easier to interpret than the standard error. Low RSEs indicate greater reliability in the figures, whereas estimates with high RSEs should be treated with caution.

Tick based confidence indicators have been shown against the June 2016 figures, ranging from 3 ticks (good) to 1 cross (poor). The ranges relate to the relative standard errors (RSE) as follows:

```
    ✓✓✓ RSE <=2.5%</li>
    ✓✓ RSE >2.5 and <=5%</li>
    ✓ RSE >5 and <=10%</li>
    ☑ RSE >10 and <=20%</li>
    ☑ RSE >20%
```

We have also shown confidence intervals against the figures. They are based on the standard error multiplied by 1.96 which gives a 95% confidence interval. We are 95% confident that this interval contains the true value. The standard errors only give an indication of the sampling error. They do not take into account any other sources of survey errors, such as non-response bias or administrative data errors.

Data notes

- All figures in tables 1 to 12 relate to commercial holdings only with the exception of the cattle figures in table 7, which relate to all holdings. Further details on commercial holdings can be seen in the methodology section on page 17.
- All percentage changes are based on unrounded figures.
- Totals may not necessarily agree with the sum of their components due to rounding.

Data uses and users

Results from the June Survey of Agriculture and Horticulture have a wide range of uses and users with requests for data being made on a daily basis. A document providing information of specific uses and users can be found via the following link:

https://www.gov.uk/government/statistical-data-sets/structure-of-the-agricultural-industry-in-england-and-the-uk-at-june.

Other survey results and publications

Results from all the Defra farming surveys can be viewed on the Defra website via the following link: https://www.gov.uk/government/publications?publication_filter_option=statistics. This also contains details of future publication dates.

The next Farming Statistics publications due from the June Survey of Agriculture and the Cereal and Oilseed Rape Production Survey are shown below. Please note that the publication dates are provisional and subject to change.

England Publications

 The next publications from the June Survey will relate to 2018 results. First early estimates of cereal, oilseed and uncropped arable land areas will be available in August 2018.

UK Publications

 21 December 2017: Farming Statistics final crop areas, yields, livestock populations and agricultural workforce at 1 June 2017 – United Kingdom.

More detailed results from the June Survey can be found at: https://www.gov.uk/government/statistical-data-sets/structure-of-the-agricultural-industry-in-england-and-the-uk-at-june. This includes various time series of crop areas and livestock numbers dating back as early as 1866 and detailed geographical breakdowns of the results.