Department for Environment Food & Rural Affairs

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Farming Statistics
Final crop areas and cattle, sheep and pig populations
At 1 June 2016 - England

This release contains the final estimates of crop areas and livestock numbers on commercial agricultural holdings in England on 1 June 2016. The results in this release are final and will not be updated. Results are not yet available for the areas of owned and rented land, poultry, horses, goats, farmed deer, camelids and labour numbers. These will be published on 27 October 2016.

Approximately 55 thousand commercial holdings were asked to complete the survey and results are based on almost 28 thousand responses, representing a response rate of 51%. Commercial holdings are those farms with a significant level of activity. A full definition can be found in the methodology section on page 16. The key results are given below.

Agricultural land use and ownership (Tables 1-2)
The utilised agricultural area (UAA) in England increased by 1.1% between 2015 and 2016 and now stands at 9.0 million hectares. The total croppable area accounts for just over half (54%) of UAA and remained almost unchanged at 4.8 million hectares in 2016. Permanent grassland accounts for an additional 42% of UAA and is almost 3.8 million hectares in 2016.

Estimates of the areas of land owned and rented will be published on 27 October 2016.

Crops (Tables 3-6)
The total area of arable crops increased by 0.6%, from 3.8 million hectares in 2015 to almost 3.9 million hectares in 2016. Cereals and oilseed crops account for the majority (83%) of the total arable crop area. The area of cereal crops increased by 1.7% to just over 2.6 million hectares in 2016. This was mainly due to a 12% increase in the area of spring sown barley between 2015 and 2016. The areas of wheat and winter barley saw little change over the same period, remaining at 1.7 million hectares and 376 thousand hectares respectively.

The area of oilseed crops decreased by 9.1% in 2016 and now stands at 571 thousand hectares. This was due to a 12% decrease in the area of winter oilseed rape, which fell from 605 thousand hectares in 2015 to 534 thousand hectares in 2016.

The area of horticultural crops accounts for 136 thousand hectares of land and has decreased by 9.1% in 2016. This was driven mainly by the 11% decrease in the area used to grow vegetables and salad for human consumption, which accounts for 68% of the total horticultural area.

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Cattle (Table 7)
The total number of cattle and calves in England is 5.4 million in June 2016, showing an increase of 0.8% since 2015. The total breeding herd remained almost unchanged between 2015 and 2016 at almost 1.9 million. A small decrease of 0.5% resulted in a dairy herd of 1.2 million animals. This was offset by a 1.2% increase in the beef herd which rose to 721 thousand in 2016.

Pigs (Table 8)
In 2016 the total number of pigs in England increased by 2.2% to 3.9 million animals. The increase was mainly driven by the rise in the number of fattening pigs, up 2.4% to 3.5 million in 2016. The female breeding herd also increased, rising from 328 thousand in 2015 to 334 thousand in 2016.

Sheep (Table 9)
The total number of sheep and lambs increased by 0.9%, from 15.1 million in 2015 to almost 15.3 million in 2016. The female breeding flock increased by 0.8% to 7.1 million and the number of lambs increased by 1.0% to 7.8 million.

Poultry (Table 10)
Estimates of the poultry population will be published on 27 October 2016.

Other livestock (Table 11)
Estimates of the number of horses, goats, farmed deer and camelids in England will be published on 27 October 2016.

Agricultural workforce (Table 12)
The size of the agricultural workforce in England will be published on 27 October 2016.

Survey methodology (Pages 16-17)
For information on how the survey is run and details of data analysis and accuracy of results please see the methodology section on pages 16 and 17 at the end of this release.

Other surveys and next publications due (Page 18)
Further information on the next publications due from the results of the June Agricultural Survey can be found on page 18. 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 9.0 million hectares in 2016.

Figure 1: Total utilised agricultural area at 1 June 2000 to 2016

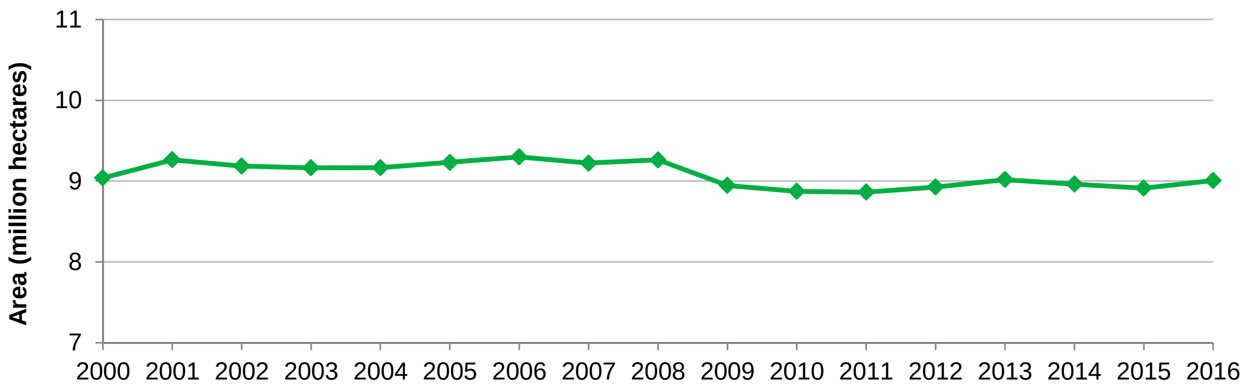


Figure 1 shows that the utilised agricultural area in England has remained stable around the 9 million hectare mark since 2000. The small drop seen between 2008 and 2009 is a result of register improvements made ahead of the 2010 Census which removed holdings that no longer have agricultural activity.

Croppable area

The area of land available for cropping remained almost unchanged at 4.8 million hectares in 2016. 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 2016 compared to 2015

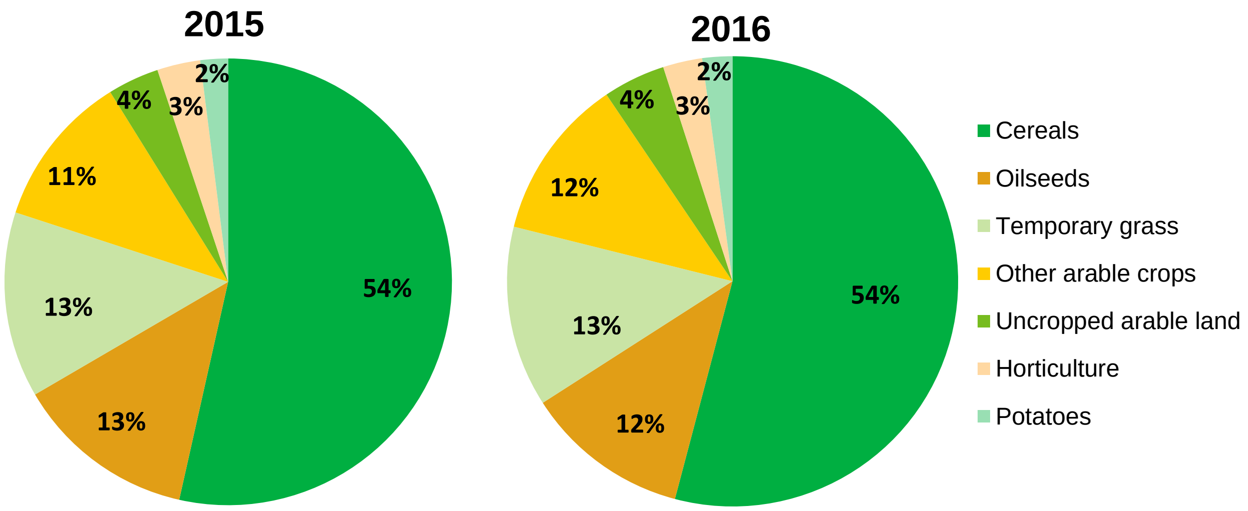


Figure 2 on the previous page shows that on the whole the proportion of croppable land used for each purpose remained similar between 2015 and 2016; however some categories did see value changes. In particular the area of uncropped arable land increased by 21% to 216 thousand hectares in 2016, however it still accounts for 4% of the total croppable area.

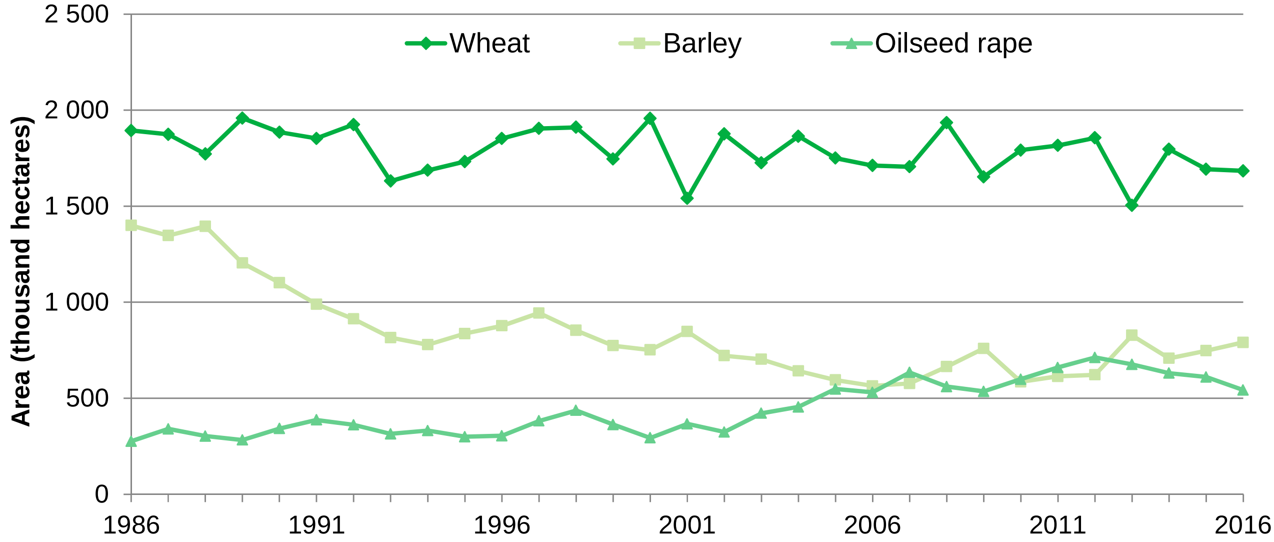
Increases were also seen in the areas of potatoes, other arable crops and cereals, rising by 8.1%, 5.3% and 1.7% respectively. In contrast the area of oilseed crops and horticultural crops both decreased by 9.1% in 2016.

Cereals and oilseeds

The total area of cereal crops in England increased by 1.7% between 2015 and 2016 to more than 2.6 million hectares. Wheat continues to be the most popular crop grown in England and accounts for almost two thirds (64%) of the total cereal area. The area of wheat saw little change between 2015 and 2016 and remains at just under 1.7 million hectares. Historically the area of wheat has fluctuated between approximately 1.5 and 2.0 million hectares over the past 30 years (Figure 3).

The winter barley area also remained unchanged over the same period at 376 thousand hectares. An increasing trend towards spring sown crops has continued this year with the spring sown barley area increasing for the second year running. Between 2015 and 2016 the area increased by 12% to 416 thousand hectares and now accounts for over half (53%) of the total barley area. Increases may be due to spring sown barley being used for black-grass management along with economic factors.

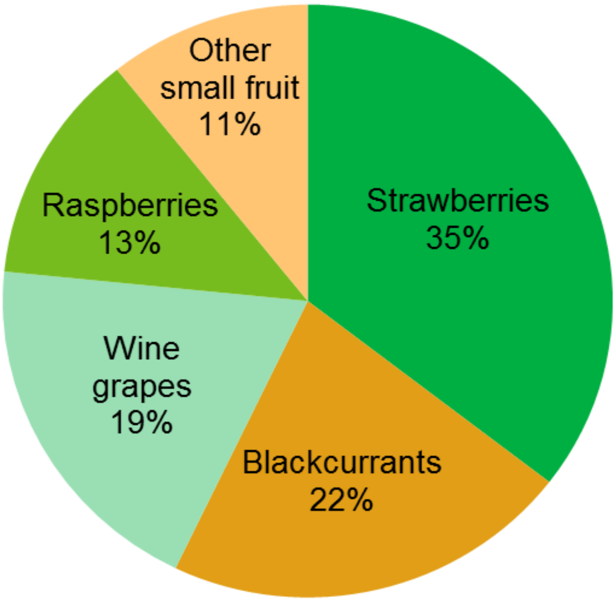
Figure 3: Area of wheat, barley and oilseed rape at 1 June 1986 to 2016



The total area of oilseed rape fell for the fourth year running, decreasing by 11% from 611 thousand hectares in 2015 to 543 thousand hectares in 2016. The decrease was due to a 12% reduction in the area of winter sown oilseed rape which accounts for 98% of the total oilseed rape area and now stands at 534 thousand hectares. In contrast, spring oilseed rape increased by 41% in 2016. However, at 9 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 2016



The total area of orchards and small fruit in 2016 decreased by 2.0% to 32 thousand hectares compared to June 2015. Orchards account for 71% of this total and cover 23 thousand hectares in 2016.

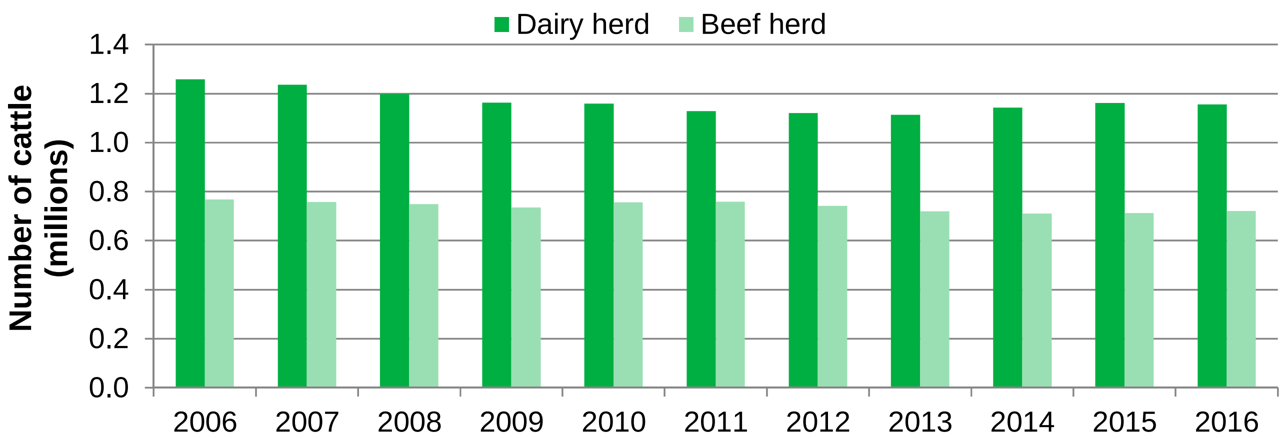
The remaining area of 9.2 thousand hectares is used to grow small fruit. Figure 4 shows the breakdown of small fruit areas in 2016. The largest proportion of the small fruit area is used to grow strawberries (35%) with blackcurrants being the next most common small fruit crop (22%).

The area used to grow vegetables for human consumption decreased between 2015 and 2016, down by 11% to 93 thousand hectares. The majority (67%) of this area is used to grow other vegetables and salad and this area decreased by 11%, from 69 thousand hectares in 2015 to 62 thousand in 2016. The second largest area is vining peas which saw a similar decrease (10%), falling from 28 thousand hectares in 2015 to 25 thousand in 2016.

Cattle

The total number of cattle and calves in England is 5.4 million in 2016, an increase of 0.8% since 2015. 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 2006 to 2016

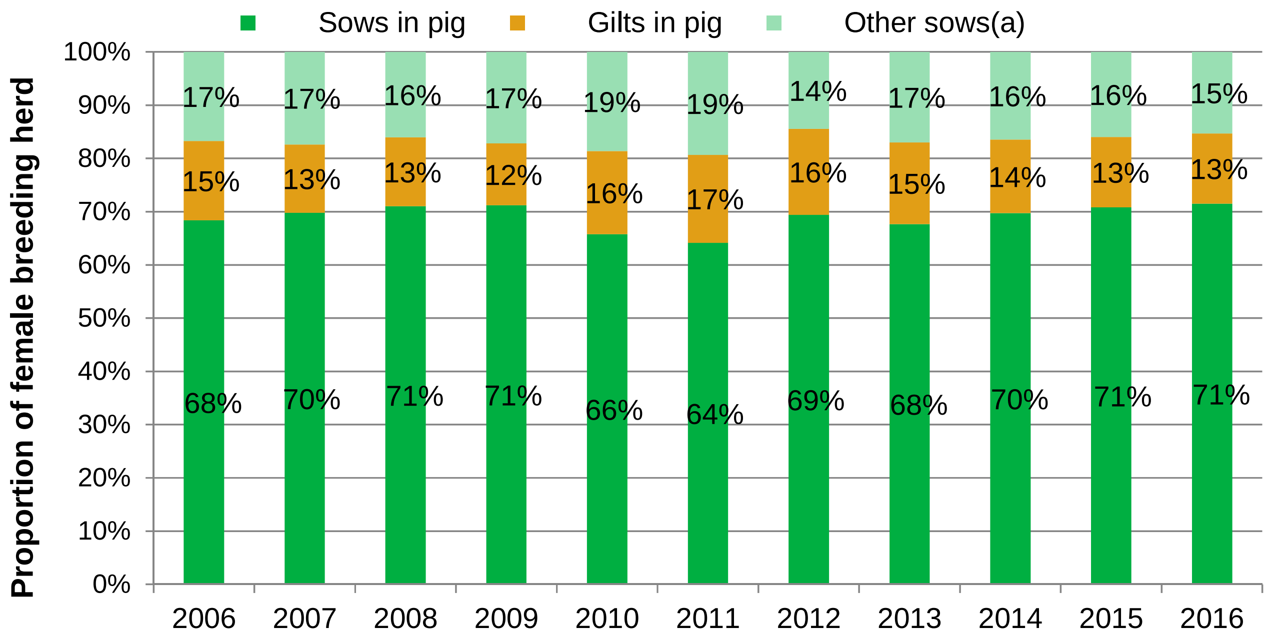


In recent years the breeding herd has been steadily decreasing from just over 2.0 million in 2006 to 1.8 million in 2013. However, since then the breeding herd has increased in each of the last three years and now stands at almost 1.9 million animals. The dairy herd continues to account for 62% of the breeding herd, despite a small decrease of 0.5% in 2016. The beef herd increased for the second year running, rising by 1.2% between 2015 and 2016 (Figure 5).

Pigs

The total number of pigs in England increased by 2.2% from 3.8 million animals in 2015 to 3.9 million in 2016. This increase was driven by a 2.4% rise in the number of fattening pigs which account for 89% of all pigs.

Figure 6: Breakdown of the female pig breeding herd 1 June 2006 to 2016



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

The female breeding herd also increased this year, rising from 328 thousand pigs in 2015 to 334 thousand in 2016. Figure 6 above shows how the female breeding herd is made up. Other breeding pigs decreased by 3.1% to 82 thousand animals in 2016. This partially offset the increase in the breeding herd resulting in an increase of 0.9% in the total number of breeding pigs.

Sheep

The total number of sheep and lambs in England increased by 0.9%, from 15.1 million in 2015 to almost 15.3 million in 2016. This was mainly due to increases in the female breeding flock (0.8%) and the number of lambs under 1 year old (1.0%) which now stand at 7.1 million and 7.8 million animals respectively.

Results tables

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

Thousand hectares

	2014	2015	2016	% change 2016-15	June 2016 confidence interval	Indicator
Utilised agricultural area [(a)]	**8 963**	**8 912**	**9 006**	**1.1**	**+/- 57**	✓✓✓
Total agricultural area	**9 432**	**9 391**	**9 520**	**1.4**	**+/- 57**	✓✓✓
Common rough grazing [(b)]	**399**	**399**	**399**	**0.0**	**-**	
Total area on agricultural holdings	**9 033**	**8 992**	**9 121**	**1.4**	**+/- 57**	✓✓✓
Total croppable area	**4 827**	**4 809**	**4 836**	**0.6**	**+/- 39**	✓✓✓
Total crops	**4 010**	**3 984**	**3 993**	**0.2**	**+/- 36**	✓✓✓
Arable crops	3 870	3 834	3 857	0.6	+/- 36	✓✓✓
Cereals	2 634	2 573	2 617	1.7	+/- 29	✓✓✓
Oilseeds	648	629	571	-9.1	+/- 13	✓✓✓
Potatoes	105	96	104	8.1	+/- 6	✓✓
Other crops	482	535	564	5.3	+/- 14	✓✓✓
Horticultural crops	139	150	136	-9.1	+/- 6	✓✓✓
Uncropped arable land [(c)]	**146**	**179**	**216**	**20.9**	**+/- 10**	✓✓✓
Temporary grass under 5 years old	**671**	**646**	**627**	**-2.9**	**+/- 10**	✓✓✓
Permanent grassland (incl. rough grazing)	**3 728**	**3 695**	**3 760**	**1.8**	**+/- 40**	✓✓✓
Grass over 5 years old	3 252	3 231	3 282	1.6	+/- 32	✓✓✓
Sole right rough grazing [(d)]	476	464	479	3.2	+/- 23	✓✓✓
Other land on agricultural holdings	**477**	**488**	**524**	**7.4**	**+/- 12**	✓✓✓
Woodland	331	348	370	6.6	+/- 10	✓✓✓
Land used for outdoor pigs	8	9	10	12.5	+/- 1	✓
All other non-agricultural land	138	131	143	9.0	+/- 5	✓✓✓

(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

	2014	2015	2016	% change 2016-15	June 2016 confidence interval	Indicator
Land owned	**5 826**	**5 887**	**tba**			
Land rented in for 1 year or more	**3 076**	**2 984**	**tba**			
Full Agricultural Tenancies	1 512	1 444	tba			
Farm Business Tenancies	1 120	1 125	tba			
Other agreements	443	415	tba			
Seasonally rented in land [(a)]	**506**	**520**	**tba**			
Seasonally let out land [(a)]	**345**	**383**	**tba**			

tba: to be announced. Estimates for owned and rented land areas will be published on 27 October 2016. The table has been included here to show historical results only.

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

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

Thousand hectares

	2014	2015	2016	% change 2016-15	June 2016 confidence interval	Indicator
Total arable crops	**3 870**	**3 834**	**3 857**	**0.6**	**+/- 36**	✓✓✓
Cereals	**2 634**	**2 573**	**2 617**	**1.7**	**+/- 29**	✓✓✓
Wheat	1 797	1 693	1 684	-0.5	+/- 23	✓✓✓
Barley	709	748	791	5.7	+/- 15	✓✓✓
winter	363	376	376	0.0	+/- 10	✓✓✓
spring	345	373	416	11.5	+/- 11	✓✓✓
Oats	105	98	102	4.3	+/- 5	✓✓
Rye, mixed corn and triticale	24	34	40	17.6	+/- 7	✓
Oilseed crops	**648**	**629**	**571**	**-9.1**	**+/- 13**	✓✓✓
Oilseed rape	632	611	543	-11.2	+/- 13	✓✓✓
winter	618	605	534	-11.7	+/- 13	✓✓✓
spring	13	6	9	41.2	+/- 2	⍓
Linseed	15	15	27	81.6	+/- 4	✓
Borage	2	3	1	-54.1	+/- 1	⊠
Potatoes	**105**	**96**	**104**	**8.1**	**+/- 6**	✓✓
Early crop (harvested on or before 31 July)	10	10	10	0.8	+/- 1	✓
Main crop (harvested after 31 July)	95	86	94	8.9	+/- 6	✓✓
Other (non-horticultural) crops	**482**	**535**	**564**	**5.3**	**+/- 14**	✓✓✓
Sugar beet [(a)]	116	90	86	-4.8	+/- 4	✓✓✓
Field beans	103	165	173	5.2	+/- 9	✓✓
Peas for harvesting dry	31	42	50	18.7	+/- 4	✓✓
Maize	171	173	182	4.8	+/- 8	✓✓✓
- of which grain maize	7	8	8	-3.7	+/- 2	⍓
- of which fodder maize	135	132	122	-7.6	+/- 4	✓✓✓
- of which maize for anaerobic digestion	29	34	52	55.1	+/- 6	✓
Root crops, brassicas and fodder beet for stock feeding	21	23	25	8.3	+/- 2	✓✓
Leguminous forage crops	11	12	14	15.6	+/- 2	✓
Other crops for stockfeeding	9	8	6	-24.2	+/- 1	⍓
All other arable crops	20	22	29	28.7	+/- 2	✓✓
- of which short rotation coppice	3	3	3	1.4	+/- 1	⍓
- of which miscanthus	7	7	7	2.2	+/- 1	✓✓
- of which crops for aromatic or medicinal use	3	4	5	22.6	+/- 2	⍓

(a) Not for stockfeeding.

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

Thousand hectares

	2014	2015	2016	% change 2016-15	June 2016 confidence interval	Indicator
Total fruit and vegetables	**128**	**137**	**125**	**-9.0**	**+/- 6**	✓✓✓
Orchards [(a)]	**21**	**24**	**23**	**-3.3**	**+/- 1**	✓✓✓
Small fruit [(b)]	**8.5**	**9.1**	**9.2**	**1.3**	**+/- 0.3**	✓✓✓
Strawberries	3.0	3.3	3.3	-1.0	+/- 0.1	✓✓✓
Raspberries	1.3	1.1	1.2	5.1	+/- 0.1	✓✓
Blackcurrants	2.0	2.1	2.0	-3.4	+/- 0.2	✓✓
Wine grapes	1.4	1.8	1.8	-1.6	+/- 0.2	✓
Other small fruit (incl. gooseberries and blackberries)	0.8	0.8	1.0	24.6	+/- 0.1	✓✓
Vegetables and salad for human consumption [(c)]	**98**	**104**	**93**	**-11.2**	**+/- 6**	✓✓
Vining peas for processing	27	28	25	-10.2	+/- 2	✓✓
Other peas and beans	4	3	3	-20.5	+/- 1	⍓
Culinary plants for human consumption (incl. herbs)	3	4	3	-21.9	+/- 1	⍓
All other vegetables and salad	64	69	62	-10.6	+/- 5	✓✓
- of which carrots	8	9	8	-5.9	+/- 1	✓
- of which onions	12	16	14	-10.3	+/- 2	✓

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

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

Hectares

	2014	2015	2016	% change 2016-15	June 2016 confidence interval	Indicator
Total hardy nursery stock, bulbs and flowers	**10 287**	**11 266**	**9 998**	**-11.3**	**+/- 584**	✓✓
Christmas trees	1 890	1 897	2 137	12.6	+/- 197	✓✓
Perennial herbaceous plants	398	354	358	1.1	+/- 60	✓
Other hardy nursery stock	2 747	2 833	2 440	-13.9	+/- 301	✓
Bulbs and flowers grown in the open	5 253	6 182	5 063	-18.1	+/- 456	✓✓

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

Hectares

	2014	2015	2016	% change 2016-15	June 2016 confidence interval	Indicator
Total glasshouse area on 1 June	**1 387**	**1 309**	**1 326**	**1.3**	**+/- 63**	✓✓✓
Vegetables, salad and fruit	737	671	733	9.3	+/- 43	✓✓
Flowers, foliage and other plants	520	475	471	-1.0	+/- 41	✓✓
Mushroom sheds	6	4	3	-23.3	+/- 3	☒
Not in use on 1 June	124	159	119	-25.3	+/- 20	✓

(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

	2014	2015	2016	% change 2016-15
Total cattle and calves	**5 374**	**5 385**	**5 429**	**0.8**
All female cattle	**3 871**	**3 903**	**3 925**	**0.6**
Aged 2 years or more	**2 303**	**2 295**	**2 274**	**-0.9**
Total breeding herd	1 853	1 874	1 877	0.2
- Beef herd	710	713	721	1.2
- Dairy herd	1 143	1 162	1 156	-0.5
Other female cattle	450	421	396	-5.8
- Beef	212	194	190	-2.2
- Dairy	238	227	207	-9.0
Aged between 1 and 2 years	**751**	**759**	**789**	**3.9**
- Beef	426	429	447	4.1
- Dairy	325	330	342	3.5
Less than 1 year	**816**	**849**	**863**	**1.7**
- Beef	476	495	510	3.0
- Dairy	341	354	353	-0.1
All male cattle	**1 503**	**1 482**	**1 504**	**1.5**
Aged 2 years or more	237	212	200	-5.4
Aged between 1 and 2 years	554	549	559	1.8
Less than 1 year	712	721	744	3.3

(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

	2014	2015	2016	% change 2016-15	June 2016 confidence interval	Indicator
Total pigs	**3 954**	**3 826**	**3 911**	**2.2**	**+/- 194**	✓✓
Breeding pigs	**411**	**413**	**417**	**0.9**	**+/- 18**	✓✓✓
Female breeding herd	**329**	**328**	**334**	**2.0**	**+/- 16**	✓✓
Sows in pig	230	232	239	3.0	+/- 15	✓✓
Gilts in pig	46	43	44	2.0	+/- 4	✓✓
Other sows [(a)]	54	52	51	-2.4	+/- 4	✓✓
Other breeding pigs	**82**	**85**	**82**	**-3.1**	**+/- 6**	✓✓
Boars being used for service	12	13	13	0.4	+/- 1	✓✓
Gilts intended for first time breeding	70	72	69	-3.7	+/- 6	✓✓
Fattening pigs (incl. barren sows)	**3 542**	**3 413**	**3 494**	**2.4**	**+/- 193**	✓✓

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

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

Thousands

	2014	2015	2016	% change 2016-15	June 2016 confidence interval	Indicator
Total sheep and lambs	**15 389**	**15 142**	**15 283**	**0.9**	**+/- 120**	✓✓✓
Female breeding flock	**7 115**	**7 057**	**7 114**	**0.8**	**+/- 76**	✓✓✓
Ewes intended for further breeding	5 605	5 481	5 462	-0.3	+/- 64	✓✓✓
Breeding ewes intended for slaughter	448	421	458	8.7	+/- 22	✓✓✓
Ewes intended for first time breeding	1 062	1 154	1 194	3.5	+/- 35	✓✓✓
Other sheep and lambs	**8 274**	**8 085**	**8 169**	**1.0**	**+/- 93**	✓✓✓
Lambs under 1 years old	7 936	7 716	7 794	1.0	+/- 92	✓✓✓
Rams	185	186	185	-0.5	+/- 4	✓✓✓
Other sheep 1 year and over	154	182	189	3.9	+/- 13	✓✓

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

Thousands

	2014	2015	2016	% change 2016-15	June 2016 confidence interval	Indicator
Total poultry	**125 544**	**125 433**	**tba**			
Total breeding and laying fowl	**32 672**	**32 608**	**tba**			
Hens and pullets laying eggs for eating	25 374	25 181	tba			
Breeding flock	7 297	7 426	tba			
Table chickens (broilers)	**82 693**	**82 585**	**tba**			
Other poultry	**10 179**	**10 240**	tba			
Ducks	1 856	2 078	tba			
Geese	99	139	tba			
Turkeys	3 443	4 010	tba			
All other poultry	4 780	4 013	tba			

tba: to be announced. Estimates for poultry numbers will be published on 27 October 2016. The table has been included here to show historical results only.

(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)]

Thousands

	2014	2015	2016	% change 2016-15	June 2016 confidence interval	Indicator
Total other livestock	**323**	**306**	**tba**			
Goats	82	82	tba			
Farmed deer	21	20	tba			
Horses	205	185	tba			
Any livestock not recorded elsewhere [(a)]	15	19	tba			
- of which alpacas	8	11	tba			
- of which llamas	1	2	tba			

tba: to be announced. Estimates for other livestock numbers will be published on 27 October 2016. The table has been included here to show historical results only.

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

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

Thousands

	2014	2015	2016	% change 2016-15	June 2016 confidence interval	Indicator
Total number of people working on commercial agricultural holdings	**302**	**305**	**tba**			
Farmers, partners, directors and spouses	**174**	**174**	**tba**			
Full time	88	90	tba			
Part time [(a)]	86	84	tba			
Salaried managers	**11**	**11**	**tba**			
Full time	8	8	tba			
Part time [(a)]	3	3	tba			
Regular and casual workers	**117**	**120**	**tba**			
Regular workers	**74**	**75**	**tba**			
- Full time	47	47				
- Part time [(a)]	28	28	**tba**			
Casual workers	**43**	**45**	**tba**			
- Male	28	29	tba			
- Female	15	16	tba			

tba: to be announced. Estimates for the agricultural workforce will be published on 27 October 2016. The table has been included here to show historical results only.

(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 55 thousand 'commercial' holdings were asked to complete the survey in 2016. 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 2016 sample design

Stratum	Description	Sampling rate (%)	Population size
1	SLR < 0.5	26	45 803
2	SLR >= 0.5 and < 1	58	16 796
3	SLR >= 1 and < 2	68	15 277
4	SLR >= 2 and < 3	73	8 527
5	SLR >= 3 and < 5	88	7 534
6	SLR >= 5	87	7 661
10	SLR unknown	47	6 366
All		**51**	**107 964**

The results in this statistical release are based on responses from almost 28 thousand commercial holdings, representing a response rate of 51%.

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/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%
✓✓	RSE >2.5 and <=5%
✓	RSE >5 and <=10%
⍓	RSE >10 and <=20%
☒	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 16.
- 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

- 27 October 2016: Farming Statistics final land use, livestock populations and agricultural workforce at 1 June 2016 – England.

UK Publications

- 13 October 2016: Farming Statistics provisional crop areas, yields and livestock populations at 1 June 2016 – United Kingdom.
- 15 December 2016: Farming Statistics final crop areas, yields, livestock populations and agricultural workforce at 1 June 2016 – 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.