



22 October 2020

Farming Statistics – Land Use, Livestock Populations and Agricultural workforce at 1 June 2020 - England

This release contains the estimates of crop areas and livestock numbers on commercial agricultural holdings in England on 1 June 2020. The results in this release are estimates and subject to change and may be updated with the final UK figures on 17 December 2020. 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 24 September 2020.

Agricultural land use and ownership

- The utilised agricultural area (UAA) in England saw no significant change between 2019 and 2020 and now stands at just under 9.02 million hectares.
- The total croppable area accounts for just over half (54%) of UAA and has decreased by 0.2% to just over 4.9 million hectares in 2020.
- Permanent grassland accounts for an additional 41% of UAA and has remained virtually unchanged at 3.7 million hectares in 2020.
- The area of owned land in England increased slightly by 0.1% to just under 6.2 million hectares in 2020. Land rented in for a year or more decreased by 3.0% to 2.9 million hectares.

Crops

- The total area of arable crops has decreased by 4.0% since 2019, and now stands at just over 3.7 million hectares in 2020.
- Cereals and oilseed crops account for the majority (79%) of the total arable crop area. The area of cereal crops decreased by 4.3% to almost 2.6 million hectares in 2020. This was due a fall of 33% in the area of winter sown barley which decreased to 259 thousand hectares and wheat which decreased by 23% to 1.3 million hectares in 2020. This was partly offset by the increase in the area of spring grown barley which increased by 83% to 813 thousand hectares.

- The area of oilseed crops decreased by 24%, falling from 509 thousand hectares in 2019 to 387 thousand hectares in 2020. This was mainly due to a 31% decrease in the area of winter oilseed rape, which accounts for the majority (87%) of all oilseed crops.
- The area of horticultural crops accounts for 140 thousand hectares of land, an increase of 2.2% compared to 2019.

Livestock

- The total number of cattle and calves in England is 5.2 million in June 2020, a decrease of 2.1% compared to 2019. The total breeding herd saw a smaller decrease of 1.6% and now stands at 1.8 million.
- In 2020, the total number of pigs in England decreased by 0.6% to just over 4.0 million animals. The decrease was mainly driven by the fall in the number of fattening pigs, which decreased by 0.5% to just over 3.6 million animals in 2020. Although neither change is statistically significant.
- The total number of sheep and lambs decreased by 2.3%, from 15.4 million in 2019 to just over 15.0 million in 2020. The female breeding flock decreased by 3.5% to just under 7.0 million, with the number of lambs also decreasing by 1.2% to just under 7.7 million.
- The total number of breeding and laying fowl in England decreased by 2.2% between 2019 and 2020 to 33 million. The number of table chickens (broilers) decreased by 3.3% in 2020 to just under 92 million.
- In 2020, the number of horses on commercial holdings decreased by 5.2% to 153 thousand head.

Agricultural workforce

- The total number of people working on agricultural holdings in England decreased by 1.5% from 306 thousand in 2019 to 302 thousand in 2020. Farmers, business partners, directors and spouses account for over half (60%) of the total workforce and saw an increase of 0.9% to 182 thousand people in 2020.

Defra would like to thank all the farmers who completed the June Survey of Agriculture questionnaire, especially during such a difficult year.

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What you need to know about this release

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National Statistics Status

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

The continued designation of these statistics as National Statistics was confirmed in 2014 following a [full assessment](#) by the UK Statistics Authority against the [Code of Practice for Statistics](#).

Since the last review of these statistics in 2014, we have continued to comply with the Code of Practice for Statistics, and have made improvements including:

- Reviewed and amended the validation checks carried out on response data including validation against new administrative data sources to better assure ourselves of the quality of the statistics.
- Enhanced trustworthiness by removing pre-release access

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Section 1 – Detailed results

1.1 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 just over 9.0 million hectares in 2020.

Figure 1 - Total utilised agricultural area at 1 June 2001 to 2020

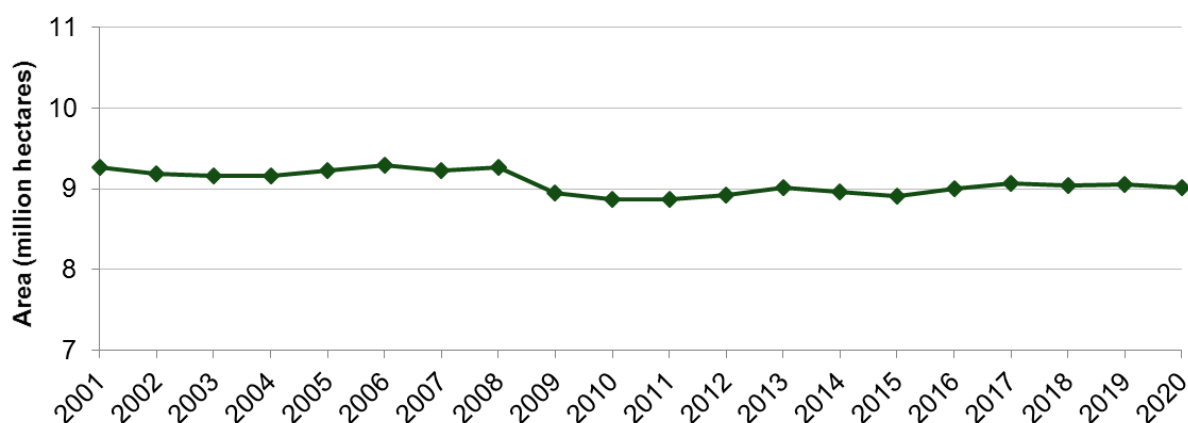


Figure 1 shows that the utilised agricultural area in England has remained stable around the 9 million hectare mark since 2001. The small drop seen between 2008 and 2009 is a result of register improvements made ahead of the 2010 Census which removed holdings that no longer have agricultural activity.

1.2 Croppable area

The area of land available for cropping saw a slight fall of 0.2% in 2020 and remains at just over 4.9 million. 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 2020 compared to 2019

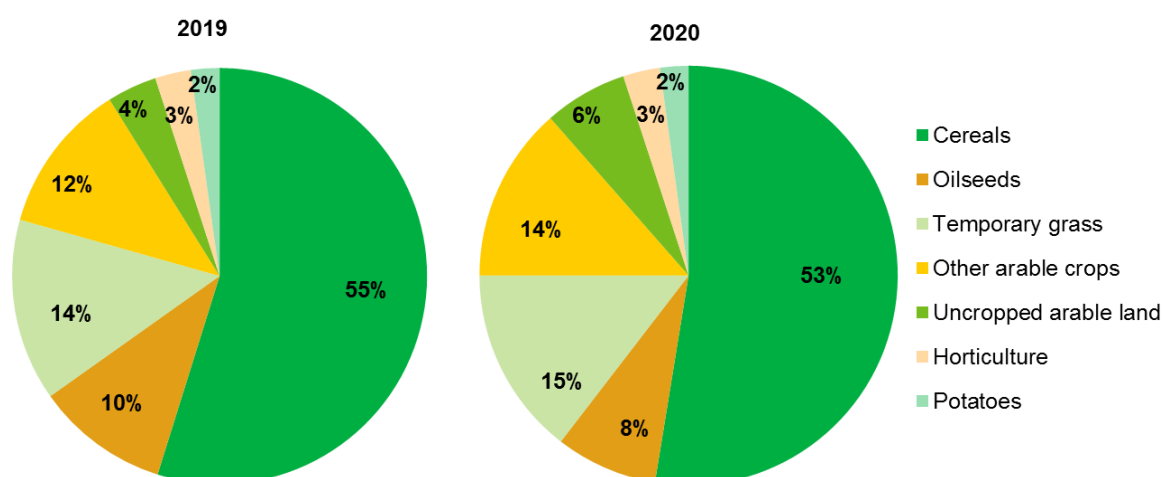


Figure 2 on the previous page shows that on the whole the proportion of croppable land used for each purpose remained similar between 2019 and 2020; however some categories did see value changes. In particular the area of uncropped arable land increased by 66%, from 191 thousand hectares in 2019 to 316 thousand hectares in 2020. However it still only accounts for 6% of the total croppable area.

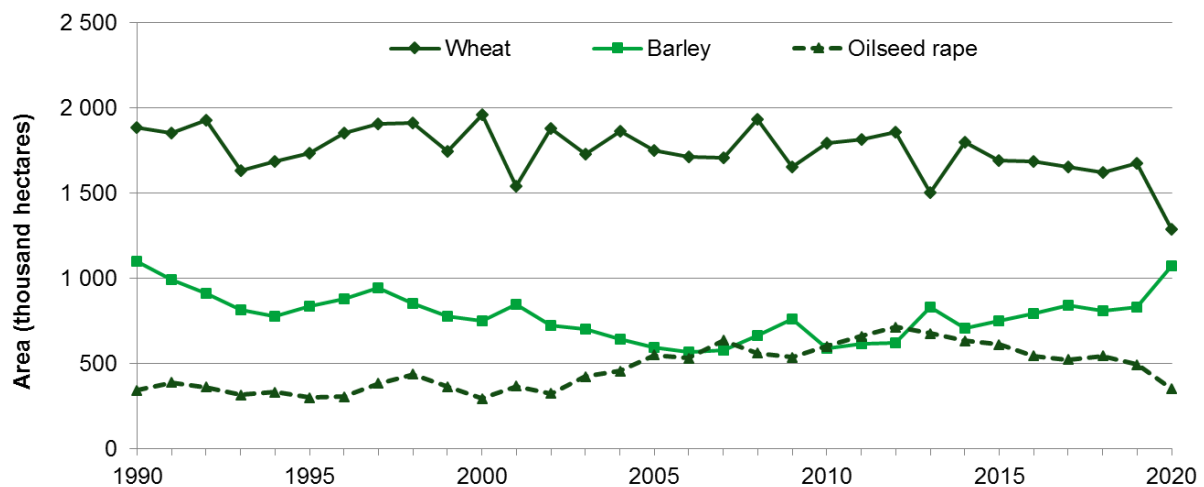
Temporary grass, other arable crops and horticulture all saw increases in 2020 but the decreases seen in cereals (4.3%), oilseeds (24%) and potatoes (1.6%) resulted in a 0.2% decrease of the total croppable area.

1.3 Cereals and oilseeds

The total area of cereal crops in England decreased by 4.3% between 2019 and 2020 and stands at almost 2.6 million hectares. With difficult weather conditions in the latter part of 2019 and then the spring droughts in 2020, there have been some noticeable changes in the areas of cereal crops in England as shown in Figure 3 below.

The area of wheat fell by 23% between 2019 and 2020 and now stands at just below 1.3 million hectares and is the smallest area of wheat recorded since the 1970's. This decrease was mainly driven by the wet weather during the winter planting.

Figure 3 - Area of wheat, barley and oilseed rape at 1 June 1990 to 2020

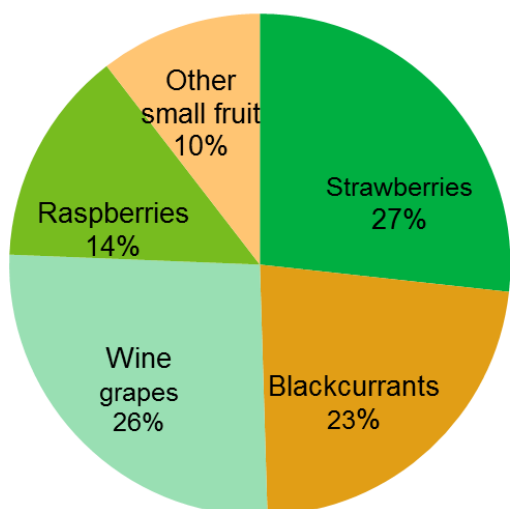


Despite the area of winter sown barley decreasing by 33% in 2020 to 259 thousand hectares compared to 388 thousand hectares in 2019, with spring sown barley increasing by 83%, the total barley area saw an increase of 29% and now stands at almost 1.1 million hectares. This is the largest area of barley seen since 1990.

As with the cereal crops, oilseed rape was affected by the wet weather at the end of 2019, resulting in the total area of oilseed rape falling by 29%, from 492 thousand hectares in 2019 to 351 thousand hectares in 2020. The decrease was due to a 31% fall in the area of winter sown oilseed rape which accounts for 96% of the total oilseed rape area and now stands at 337 thousand hectares. Spring oilseed rape saw an increase of 229% in 2020. However, at 14 thousand hectares this still only accounts for 4% of the total oilseed area but is the largest area of the spring sown crop seen since 2014.

1.4 Fruit and vegetables

Figure 4 - Breakdown of small fruit as at 1 June 2020



Figures in chart may not add up due to rounding

The total area of orchards and small fruit decreased by 4.1% between 2019 and 2020 to 30 thousand hectares. Orchards account for 68% of this total and cover just under 21 thousand hectares in 2020, a decrease of 3.6% since 2019.

The remaining area of just under 10 thousand hectares is used to grow small fruit. This area decreased by 5.0% since 2019. Figure 4 shows the breakdown of small fruit areas in 2020. The largest proportion of the small fruit area is used to grow strawberries (27%) with wine grapes (26%) and blackcurrants (23%)

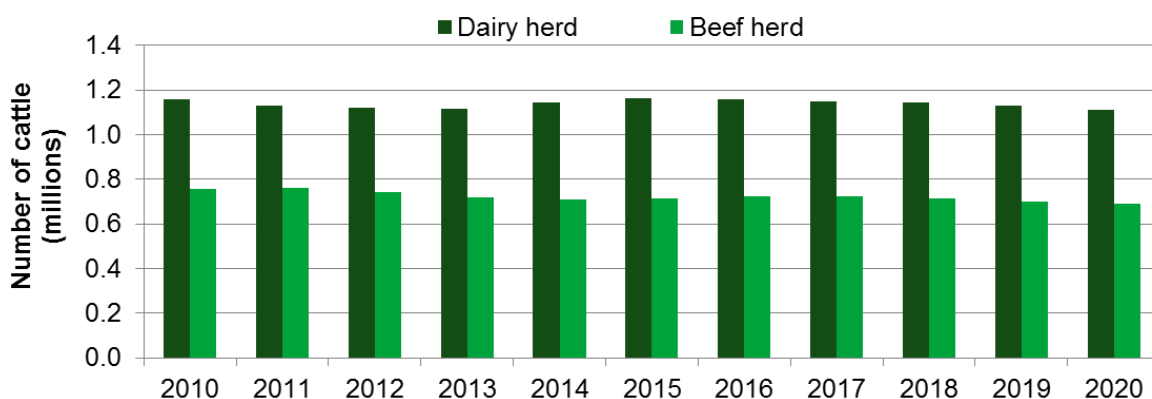
being the next most common small fruit crops.

The area used to grow vegetables for human consumption increased between 2019 and 2020 by 4.9%, to 99 thousand hectares. The majority (67%) of this area is used to grow other vegetables and salad and this area increased by 9.5% between 2019 and 2020.

1.5 Cattle

The total number of cattle and calves in England decreased by 2.1% between 2019 and 2020 and now stands at just below 5.2 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 2010 to 2020



The breeding herd decreased slightly in 2020, falling by 1.6% to 1.8 million animals. The dairy herd accounts for the majority (62%) of the breeding herd and fell by 1.7% in 2020 and now stands at just over 1.1 million animals. The beef herd also saw a decrease between 2019 and 2020 of 1.5% to 688 thousand animals. See Figure 5, above.

1.6 Pigs

The total number of pigs in England decreased slightly by 0.6% to just over 4.0 million animals in 2020. This decrease was mainly driven by a fall in the number of fattening pigs which account for 90% of all pigs (see table 8). Although neither change is statistically significant.

Figure 6 - Breakdown of the female pig breeding herd 1 June 2010 to 2020



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

The female breeding herd decreased by 3.3% in 2020 and fell to 316 thousand animals. Figure 6 above shows how the female breeding herd is made up. Other breeding pigs saw an increase in 2020 of 3.4%, rising from 83 to 86 thousand animals.

1.7 Sheep

The total number of sheep and lambs in England decreased by 2.3%, from 15.4 million in 2019 to just over 15.0 million in 2020. Lambs account for just over half (51%) of all sheep and decreased by 1.2% from 7.8 million in 2019 to 7.7 million in 2020. The female breeding flock account for a further 46% of all sheep and decreased by 3.5% to just under 7.0 million sheep in 2020.

1.8 Poultry

The number of table chickens (broilers) decreased by 3.3%, from 95.1 million birds on 1 June 2019 to just under 92 million on 1 June 2020. Table chickens account for two thirds of all poultry in England and consumer demand remains strong.

In 2020 the total number of breeding and laying fowl in England decreased by 2.2% and now stands at just over 33 million birds. Hens and pullets laying eggs for eating account for the majority (74%) of the breeding and laying flock and decreased by 3.6% from 25.4 million in 2019 to 24.5 million in 2020.

The number of geese and turkeys in England both saw decreases in 2020, falling by 5.1%, and 7.0% respectively. However, the number of ducks saw an increase of 7.0%, rising from 1.7 million in 2019 to 1.8 million in 2020.

1.9 Other livestock

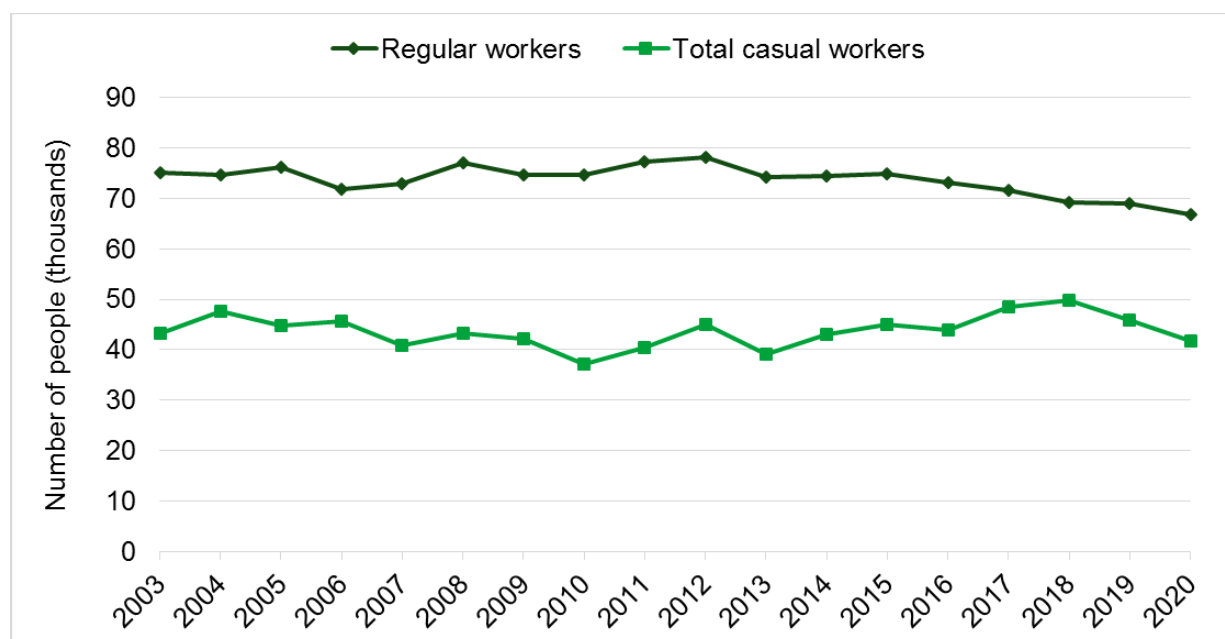
In 2020 the number of horses on commercial holdings in England decreased by 5.2% falling from 162 to 153 thousand animals. The number of farmed deer decreased by 8.7% and fell from 22 thousand in 2019 to 20 thousand in 2020. The number of goats saw an increase, rising by 1.7% during the same period, to 90 thousand animals.

1.10 Agricultural workforce

The total number of people working in agriculture in England was 302 thousand on 1 June 2020, showing a decrease of 1.5% since 1 June 2019. Farmers, business partners, directors and spouses account for over half (60%) of the total workforce and saw an increase (0.9%) to 182 thousand people in 2020. Salaried managers make up a much smaller proportion of the total (4%) and fell by 0.9% in 2020 to 12 thousand people.

Regular employees and casual workers make up the remainder (36%) of the total workforce. Full time regular workers decreased by 0.8% between 2019 and 2020 and now stand at 43 thousand. Part time regular workers saw a decrease of 6.9% to 24 thousand people. These results are a snapshot of the workforce on the farm at 1 June, given the nature of agricultural work, it is therefore not unusual for the number of casual workers to vary from year to year. The number of casual workers decreased by 8.7% from 46 thousand people on 1 June 2019 to 42 thousand on 1 June 2020. See figure 7, below.

Figure 7: Number of regular and casual workers at 1 June 2003 to 2020



1.11 Results tables

Table 1: Summary of land use on commercial agricultural holdings on 1 June (thousand hectares)

Item	2019	2020	% change 2020-19	Jun 20 confidence interval	Indicator
Utilised agricultural area ^(a)	9,059	9,017	-0.5	+/- 127	✓✓✓
Total agricultural area	9,605	9,569	-0.4	+/-127	✓✓✓
Common rough grazing ^(b)	399	399	0.0	-	
Total area on agricultural holdings	9,206	9,170	-0.4	+/- 127	✓✓✓
Total croppable area	4,914	4,904	-0.2	+/- 48	✓✓✓
Total crops	4,028	3,876	-3.8	+/- 42	✓✓✓
Arable crops	3,890	3,735	-4.0	+/- 41	✓✓✓
Cereals	2,695	2,579	-4.3	+/- 25	✓✓✓
Oilseeds	509	387	-24	+/- 8	✓✓✓
Potatoes	109	108	-1.6	+/- 9	✓✓
Other crops	577	663	15	+/- 30	✓✓✓
Horticultural crops	137	140	2.2	+/- 7	✓✓
Uncropped arable land ^(c)	191	316	66	+/- 11	✓✓✓
Temporary grass under 5 years old	696	713	2.4	+/- 21	✓✓✓
Permanent grassland (incl. rough grazing)	3,736	3,704	-0.9	+/- 117	✓✓✓
Grass over 5 years old	3,294	3,269	-0.8	+/- 115	✓✓✓
Sole right rough grazing ^(d)	442	435	-1.5	+/- 20	✓✓✓
Other land on agricultural holdings	555	562	1.2	+/- 13	✓✓✓
Woodland	379	385	1.6	+/- 11	✓✓✓
Land used for outdoor pigs	10	10	-2.4	+/- 1	✓
All other non-agricultural land	166	167	0.5	+/- 7	✓✓✓

(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)

Item	2019	2020	% change 2020-19	June 20 confidence interval	Indicator
Land owned	6,179	6,186	0.1	+/- 97	✓✓✓
Land rented in for 1 year or more	3,013	2,923	-3.0	+/- 60	✓✓✓
Full Agricultural Tenancies	1,305	1,294	-0.9	+/- 41	✓✓✓
Farm Business Tenancies	1,267	1,192	-5.9	+/- 33	✓✓✓
Other agreements	441	437	-0.7	+/- 29	✓✓
Seasonally rented in land ^(a)	542	522	-3.8	+/- 27	✓✓
Seasonally let out land ^(a)	482	483	0.4	+/- 49	✓

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

Table 3: Arable crops on commercial agricultural holdings on 1 June (thousand hectares)

Item	2019	2020	% change 2020-19	June 2020 confidence interval	Indicator
Total Arable crops	3,890	3,735	-4.0	+/- 41	✓✓✓
Cereals	2,695	2,579	-4.3	+/- 25	✓✓✓
Wheat	1,677	1,290	-23	+/- 18	✓✓✓
Barley	832	1,072	29	+/- 15	✓✓✓
winter	388	259	-33	+/- 6	✓✓✓
spring	444	813	83	+/- 14	✓✓✓
Oats	143	170	19	+/- 6	✓✓✓
Rye, mixed corn and triticale	43	46	6.4	+/- 6	✓
Oilseed crops	509	387	-24	+/- 8	✓✓✓
Oilseed rape	492	351	-29	+/- 8	✓✓✓
winter	488	337	-31	+/- 6	✓✓✓
spring	4	14	229	+/- 5	☒
Linseed	15	32	112	+/- 3	✓
Borage	2	3	52	+/- 1	☒
Potatoes	109	108	-1.6	+/- 9	✓✓
Early crop (harvested on or before 31 July)	11	10	-6.1	+/- 2	☒
Main crop (harvested after 31 July)	98	97	-1.1	+/- 9	✓✓
Other (non-horticultural) crops	577	663	15	+/- 30	✓✓✓
Sugar beet ^(a)	108	112	3.7	+/- 7	✓✓
Field beans	135	186	38	+/- 8	✓✓✓
Peas for harvesting dry	40	52	28	+/-21	☒
Maize	211	226	6.8	+/- 15	✓✓
of which grain maize	9	12	28	+/- 7	☒
of which fodder maize	136	138	1.8	+/- 10	✓✓
of which maize for anaerobic digestion	67	76	14	+/- 10	✓
Root crops, brassicas and fodder beet for stock feeding	35	40	15	+/- 6	✓
Leguminous forage crops	15	14	-1.9	+/- 4	☒
Other crops for stockfeeding	10	12	18	+/- 4	☒
All other arable crops	23	21	-9.4	+/- 7	☒
of which short rotation coppice	2	2	-9.5	+/- 0.2	✓
of which miscanthus	8	8	1.6	+/- 2	☒
of which crops for aromatic or medicinal use ^(b)	3	na	-	-	

(a) Not for stockfeeding

(b) In 2020 there was insufficient response data to produce robust estimates, therefore the figures have been included in the total for other arable crops

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

Item	2019	2020	% change 2020-19	June 2020 confidence interval	Indicator
Total fruit and vegetables	126	129	2.6	+/- 7.4	✓✓
Orchards (a)	21	21	-3.6	+/- 1.1	✓✓
Small fruit (b)	10.2	9.7	-5.0	+/- 0.4	✓✓✓
Strawberries	2.9	2.6	-9.8	+/- 0.1	✓✓✓
Raspberries	1.3	1.4	6.9	+/- 0.1	✓✓✓
Blackcurrants	2.3	2.2	-3.5	+/- 0.2	✓✓
Wine grapes	2.5	2.5	-0.4	+/- 0.3	✓
Other small fruit (incl. gooseberries & blackberries)	1.2	1.0	-18	+/- 0.1	✓✓
Vegetables and salad for human consumption (c)	94	99	4.9	+/- 7.3	✓✓
Vining peas for processing	27	27	-2.9	+/- 5.1	✓
Other peas and beans	3	3	-1.9	+/- 1.0	☒
Culinary plants for human consumption (incl. herbs)	4	4	-6.3	+/- 1.6	☒
All other vegetables and salad	60	66	9.5	+/- 4.8	✓✓
of which carrots	7	7	13	+/- 2.4	☒
of which onions	13	14	7.7	+/- 1.8	✓

(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 (thousand hectares)

Item	2019	2020	% change 2020-19	June 2020 confidence interval	Indicator
Total hardy nursery stock, bulbs and flowers	9,903	9,639	-2.7	+/- 1,193	✓
Christmas trees	1,570	1,619	3.1	+/- 178	✓
Perennial herbaceous plants	405	395	-2.4	+/- 56	✓
Other hardy nursery stock	2,051	2,020	-1.5	+/- 289	✓
Bulbs and flowers grown in the open	5,876	5,605	-4.6	+/- 1,143	☒

Table 6: Glasshouses and protected crops on commercial agricultural holdings on 1 June (thousand hectares) ^{(a) (b)}

Item	2019	2020	% change 2020-19	June 2020 confidence interval	Indicator
Total glasshouse area on 1 June	1,195	1,180	-1.2	+/- 35	✓✓✓
Vegetables, salad and fruit	684	661	-3.4	+/- 25	✓✓✓
Flowers, foliage and other plants	409	408	-0.1	+/- 10	✓✓✓
Mushroom sheds ^(c)	na	na	-	-	
Not in use on 1 June	102	111	9.1	+/- 24	☒

(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. See table 4.

(c) Since 2018 there has not been enough response data to produce robust estimates and therefore the figures are excluded from the results and the totals.

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

Item	2019	2020	% change 2020-19
Total cattle and calves	5,280	5,168	-2.1
All female cattle	3,832	3,776	-1.5
Aged 2 years or more	2,194	2,141	-2.4
Total breeding herd	1,829	1,800	-1.6
- Beef herd	699	688	-1.5
- Dairy herd	1,131	1,112	-1.7
Other female cattle	365	341	-6.5
- Beef	197	189	-4.2
- Dairy	167	152	-9.1
Aged between 1 and 2 years	789	780	-1.2
- Beef	479	475	-0.9
- Dairy	309	304	-1.7
Less than 1 year	849	855	0.7
- Beef	533	534	0.2
- Dairy	316	321	1.5
All male cattle	1,448	1,393	-3.8
Aged 2 years or more	191	176	-7.9
Aged between 1 and 2 years	559	538	-3.7
Less than 1 year	698	679	-2.8

(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)

Item	2019	2020	% change 2020-19	June 2020 confidence interval	Indicator
Total pigs	4,060	4,035	-0.6	+/- 317	✓✓
Breeding pigs	410	402	-1.9	+/- 22	✓✓
Female breeding herd	327	316	-3.3	+/- 16	✓✓
Sows in pig	234	231	-1.5	+/- 15	✓✓
Gilts in pig	43	42	-2.2	+/-3	✓✓
Other sows ^(a)	50	44	-12	+/- 3	✓✓
Other breeding pigs	83	86	3.4	+/- 16	✓
Boars being used for service	10	10	-6.4	+/- 1	✓
Gilts intended for first time breeding	73	76	4.8	+/- 15	☒
Fattening pigs (incl. barren sows)	3,650	3,633	-0.5	+/- 316	✓✓

(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)

Item	2019	2020	% change 2020-19	June 2020 confidence interval	Indicator
Total sheep and lambs	15,390	15,038	-2.3	+/- 312	✓✓✓
Female breeding flock	7,234	6,983	-3.5	+/- 177	✓✓✓
Ewes intended for further breeding	5,597	5,417	-3.2	+/- 159	✓✓✓
Breeding ewes intended for slaughter	521	492	-5.7	+/- 48	✓✓
Ewes intended for first time breeding	1,115	1,075	-3.6	+/- 59	✓✓
Other sheep and lambs	8,156	8,055	-1.2	+/- 258	✓✓✓
Lambs under 1 years old	7,775	7,683	-1.2	+/- 256	✓✓✓
Rams	193	184	-4.4	+/- 7	✓✓✓
Other sheep 1 year and over	189	188	-0.6	+/- 28	✓

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

Item	2019	2020	% change 2020-19	June 2020 confidence interval	Indicator
Total poultry	138,850	134,322	-3.3	+/- 15,684	✓
Total breeding and laying fowl	33,799	33,041	-2.2	+/- 2,225	✓✓
Hens and pullets laying eggs for eating	25,388	24,482	-3.6	+/- 1,536	✓✓
Breeding flock	8,411	8,559	1.8	+/- 1,610	✓
Table chickens (broilers)	95,150	91,968	-3.3	+/- 15,502	✓
Other poultry	9,901	9,313	-5.9	+/- 841	✓✓
Ducks	1,712	1,832	7.0	+/- 61	✓✓✓
Geese	141	134	-5.1	+/- 9	✓✓
Turkeys	3,802	3,535	-7.0	+/- 423	✓
All other poultry	4,246	3,812	-10	+/- 725	✓

(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)

Item	2019	2020	% change 2020-19	June 2020 confidence interval	Indicator
Total other livestock	298	290	-2.5	+/- 16.9	✓✓
Goats	89	90	1.7	+/- 8.9	✓
Farmed deer	22	20	-8.7	+/- 5.3	☒
Horses	162	153	-5.2	+/- 11.1	✓✓
Any livestock not recorded elsewhere ^(a)	26	27	5.0	+/- 7.4	☒
- of which alpacas	9	11	18	+/- 2.7	☒
- of which llamas	1	1	-16	+/- 0.4	☒

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

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

Item	2019	2020	% change 2020-19	June 2020 confidence interval	Indicator
Total number of people working on commercial agricultural holdings	306	302	-1.5	+/- 4.3	✓✓✓
Farmers, partners, directors and spouses	180	182	0.9	+/- 3.3	✓✓✓
Full time	93	94	0.8	+/- 2.2	✓✓✓
Part time ^(a)	87	88	1.1	+/- 2.4	✓✓✓
Salaried managers	12	12	-0.9	+/- 0.7	✓✓
Full time	9	9	0.1	+/- 0.6	✓✓
Part time ^(a)	3	3	-4.1	+/- 0.5	✓
Regular and casual workers	115	109	-5.3	+/- 2.6	✓✓✓
Regular workers	69	67	-3.1	+/- 2.0	✓✓✓
Full time	43	43	-0.8	+/- 1.3	✓✓✓
Part time	26	24	-6.9	+/- 1.5	✓✓
Casual workers	46	42	-8.7	+/-1.8	✓✓✓
Male	29	26	-9.7	+/- 1.5	✓✓
Female	17	15	-6.9	+/- 0.9	✓✓

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

Section 2 – About these statistics

2.1 Survey methodology

Full details of the survey methodology are available on the [web site](#).

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. This year the survey was run entirely online to enable us to adapt to the limitations caused by the coronavirus outbreak.

It was not possible to run the planned Census in 2020 due to coronavirus limitations. To reduce the burden on farmers at a difficult and uncertain time the Census was postponed and a smaller scale June survey was run instead. Approximately 22 thousand 'commercial' holdings were asked to complete the survey in 2020 and the survey was classed as voluntary.

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 2020 sample design

Stratum	Description	Sampling rate (%)	Population size
1	SLR < 0.5	8%	48,815
2	SLR >= 0.5 and < 1	8%	16,698
3	SLR >= 1 and < 2	21%	13,992
4	SLR >= 2 and < 3	45%	7,775
5	SLR >= 3 and < 5	59%	7,327
6	SLR >= 5	67%	7,733
10	SLR unknown	23%	5,666
All	All farms	21%	108,006

The results in this statistical release are based on responses from around 7,500 commercial holdings, representing a response rate of 36%. In addition to this, around 62,000 BPS responses have been used to help produce the best estimates

possible. Although these areas are not yet finalised they provide an overview of activity on the holding and reduce the need for estimation.

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”](#)

2.2 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.

2.3 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 2019 figures, ranging from 3 ticks (good) to 1 cross (poor). The ranges relate to the relative standard errors (RSE) as follows:

- ✓✓✓ indicates RSE $\leq 2.5\%$
- ✓✓ indicates RSE > 2.5 and $\leq 5\%$
- ✓ indicates RSE > 5 and $\leq 10\%$
- ☒ indicates RSE > 10 and $\leq 20\%$
- ☒ indicates 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 20.

- All percentage changes are based on unrounded figures.
- Totals may not necessarily agree with the sum of their components due to rounding.

2.4 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 on our [web page](#).

2.5 Other survey results and publications

Results from all the Defra farming surveys can be viewed on the [Defra website](#). 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 2021 results. First early estimates of cereal, oilseed and uncropped arable land areas will be available in August 2021.

UK Publications

- 17 December 2020: Farming Statistics final crop areas, yields, livestock populations and agricultural workforce at 1 June 2020 – United Kingdom.

More detailed results from the June Survey can be found on our [web page](#). This includes various time series of crop areas and livestock numbers dating back as early as 1866 and detailed geographical breakdowns of the results.

2.6 Feedback

We welcome feedback and any thoughts to improve the publication further. Please send any feedback to: farming-statistics@defra.gov.uk. Suggested questions to help you structure your feedback are below but all feedback is welcome:

- How relevant is the current content of the publication to your needs as a user?
- What purpose do you require the data for?
- Which data do you find most useful?
- Is there any content that you did not find useful?
- Do you have any suggestions for further development of this release; including additional content, presentation and any other thoughts?

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