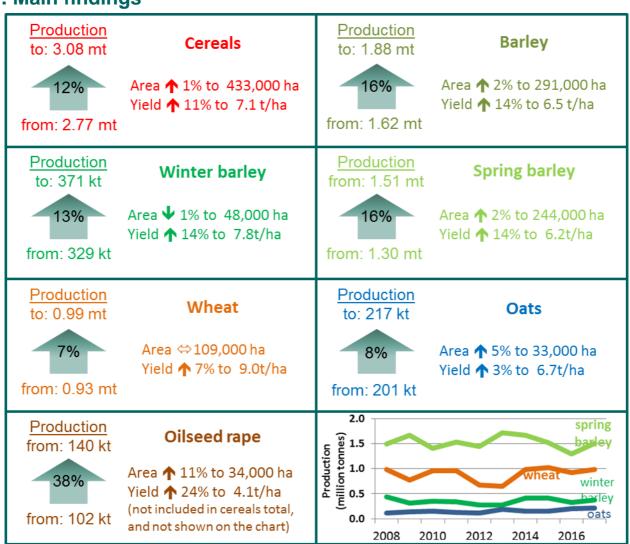


AGRICULTURE, ENVIRONMENT AND MARINE

First Estimate of the Cereal and Oilseed Rape Harvest 2017

4th October 2017

1. Main findings



Contents

1. Main findings	1
2. Cereals	5
3. Barley	7
4. Wheat	10
5. Oats	11
6. Oilseed Rape	12
7. Methodology and Quality Note	14
8. Reference Tables	21
Table 1: Cereal Area, Yield and Production 2015 and 2016	21
Table 2: Cereal Area, Yield and Production 1997 to 2016	22
Table 3: Oilseed rape Area, Yield and Production 1997 to 2016	23
Table 4: Cereals - Comparison of Provisional and Final Estimates 200	06 to
2015	24
A National Statistics publication for Scotland	25

Area, yield and production definitions

Cereal and oilseed rape crop areas represent the amount of area that has been used to grow a particular crop, which is intended for combine harvesting and the production of grain or oilseeds. Area estimates are derived from the June Agricultural Census and specifically exclude any areas of cereals which are not intended for combine harvesting. Due to the later release of census results this year, provisional area estimates have been used. Whole crop cereals are harvested whole (i.e. without extracting the grain) and are used as a source of animal feed.

Average yields are expressed in tonnes per hectare and represent the amount of cereal grain or oilseed that is extracted from one hectare of combine harvested area. As the moisture content of cereals and oilseeds can vary from year-to-year and farm-to-farm, depending on the level of rainfall, average yields are adjusted to a standard moisture content of 14.5 per cent for cereals and nine per cent for oilseeds. This adjustment ensures there is consistency in estimates of the amount of dry matter which can be extracted from cereal grain and oilseeds.

Production estimates are derived by multiplying crop areas (in hectares) and average yields (in tonnes per hectare). They represent the total tonnage of cereal grain and oilseed that is combine harvested from the planted area. This tonnage does not include the weight of straw and other plant material which is produced as a by-product and used for other purposes.

When discussing production and area we are referring to estimated totals. When discussing yield we are referring to estimated averages.

Cautionary Note

First estimates of the Scottish cereal and oilseed rape harvest are derived at the annual Crop Report Meeting (CRM). A panel of experts from the Scottish cereal industry provide their estimates of the harvest yields, based on their initial soundings, and these are applied to provisional data for areas sown. This year's Crop Report Meeting took place on Monday 25th September. When the meeting took place the harvest was still underway in some areas of Scotland.

Final estimates of the 2017 cereal and oilseed rape harvest, based on data gathered from a sample of farms across Scotland, will be available in December. They are usually within five per cent of the first estimates of production.

Provisional estimates for the 2017 harvest, based on industry reports, suggest that

- total cereal production is estimated to have increased by 333,000 tonnes, or 12 per cent, to 3.08 million tonnes, the third highest on record.
- the overall increase in cereal production this year is due to an 11 per cent increase in yield and a one per cent increase in area. The overall yield of 7.1 tonnes per hectare would be the highest on record.
- spring barley is reported to have experienced a 16 per cent increase in production, to 1.51 million tonnes. This was due to a 14 per cent increase in yield and a two per cent increase in area. The expected yield of 6.2 tonnes per hectare would be the highest on record.
- winter barley production increased by 13 per cent to 371,000 tonnes, due to a 14 per cent increase in yield and a one per cent reduction in area.
- wheat production increased seven per cent to 988,000 tonnes, due to a seven per cent increase in yield, while the total area again remained unchanged.
- oats are expected to see an eight per cent increase in production, to 217,000 tonnes, due to a five per cent increase in planted area and a three per cent increase in yield.
- oilseed rape production increased by 38 per cent to 140,000 tonnes, relative to the record low of 2016, with an 11 per cent increase in area and a 24 per cent increase in yield.

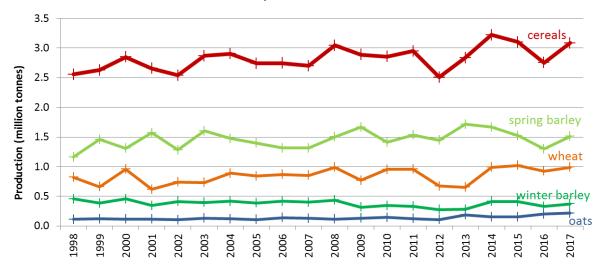


Chart 1: Cereal Production Trends, 1998 to 2017

The average total yield across the most recent ten years is four per cent above the previous decade's. Long term increases are likely to be due to improved efficiency in practices, development and use of high yielding varieties.

The large percentage increase this year is partly due to the poor harvest last year. However, production in 2017 is expected to be six per cent above the average for the decade. Despite some wet conditions during harvest, and a period of very dry weather earlier in the year, spring sowings were well established and moisture came at the right time to encourage growth. Moisture content at harvest is high, meaning that drying costs will have increased considerably this year.

According to the Food and Agriculture Organisation, the forecast for world cereal production in 2017 is at 2.61 billion tonnes, very slightly above the 2016 record.

2. Cereals

Production

Total cereal production in Scotland is estimated to have increased in 2017 by 333,000 tonnes to 3.08 million tonnes. This is the third highest on record, behind 2014 and 2015. While moisture content has been particularly high, industry experts collecting data have reported no particular concerns over quality.

In 2016 cereals were estimated to have accounted for about 11 per cent of farm output.

Area

Initial estimates suggest that the total cereal area increased one per cent compared to 2016. About 433,000 hectares of cereals were grown this year. Only 2016 and 2010 have seen lower areas sown in the last decade.

Yield

The overall yield estimate for Scottish cereals is the highest on record, at 7.1 tonnes per hectare. While these are early estimates, the expected yields for all crops in this report are estimated to have increased on last year, with record high yields for spring barley and oats.

The long term trend of increasing yields remain, with the recent ten-year average of 6.6 tonnes per hectare four

Chart 2: Production (tonnes)

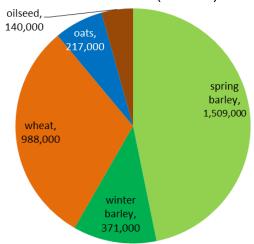


Chart 3: Area (hectares)

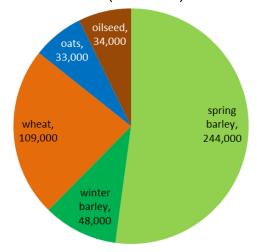
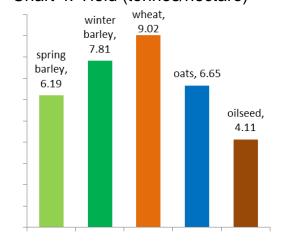


Chart 4: Yield (tonnes/hectare)



per cent above the previous ten-year average. This long term increase is likely to be due to an improved efficiency in farming practices as well as development and use of higher yielding crop varieties. The shorter term variations in cereal yields are more likely to be influenced by weather and other conditions during the growing season.

Other cereals

Triticale is a marginal crop in Scotland, grown on around 600 hectares. Because there are relatively few farms growing triticale, estimates have not been produced this year.

Rye is increasingly being grown, with 3,700 hectares in 2016, though it is mainly whole-cropped for anaerobic digestion.

Oilseed, though not a cereal, is also shown for comparison in the above charts, though is not included in calculations and commentary about cereal totals.

Charts

Chart 5 shows the areas estimated from the June Agricultural Census as bars and the estimated production and estimated average yield as lines. Area is presented in hundreds of hectares, production in thousands of tonnes and yield in tonnes per hectare.

Chart 6 shows the year-on-year change of areas, total production and average yield. This allows the drivers of fluctuations in production to be more easily distinguished and gives a sense of the typical fluctuations from year to year. In chart 6 all measures are presented as the percentage change compared to the previous year.

In the following sections similar charts are used to display the results for each crop group, though the scales of the chart axes are not the same in every case.

Chart 5 - Total Cereals: Area, Yield and Production

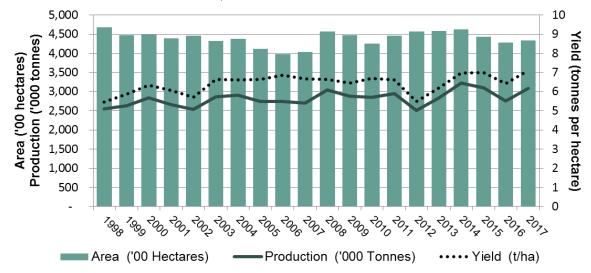
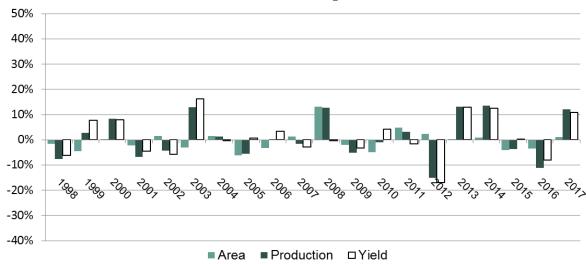


Chart 6 - Total Cereals Year-on-Year Change: Area, Yield and Production



3. Barley

Barley is the predominant cereal crop grown in Scotland and, in 2016, contributed about a quarter of the UK barley production, particularly spring barley which accounted for a third of the UK total. Despite a strong association with the Scottish whisky industry, as a key ingredient, about a half of Scottish barley is used as animal feed.

Spring Barley Estimates (charts 7 and 8)

Spring barley production is estimated to have increased by 16 per cent in 2017. Over the last 20 years, spring barley production has been following a generally increasing trend. Production reached the highest level over the period in 2013, at 1.71 million tonnes. However, in the next three years spring barley production fell, by 49,000 tonnes in 2014, a further 144,000 tonnes in 2015, and another 255,000 tonnes in 2016, to 1.27 million tonnes. This year's

initial estimate, while recovering somewhat, is 12 per cent lower than the high of 2013, due to the smaller area grown.

The area of spring barley varies considerably depending on the planting of winter crops, but in 2017 the provisional figure of 240,000 hectares was the second lowest since 2010. The average yield for spring barley in 2017 has been estimated at 6.19 tonnes per hectare, the highest on record and well above the ten-year average of 5.76.

The longer term trend in yield is an increasing one, with the average over the most recent decade five per cent higher than over the previous 10 years.

Chart 7 - Spring Barley: Area, Yield and Production

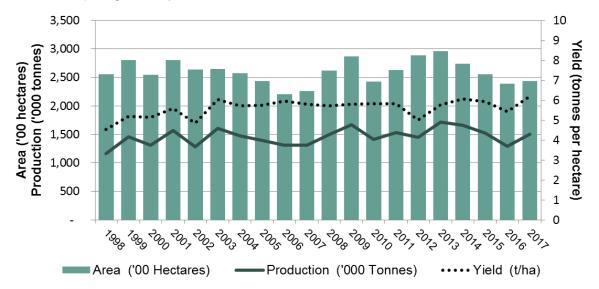
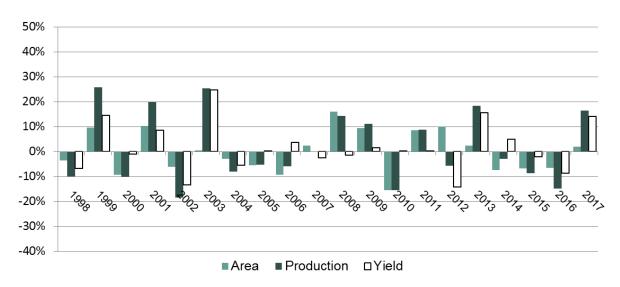


Chart 8 - Spring Barley Year-on-Year Change: Area, Yield and Production



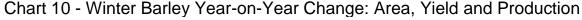
Winter Barley Estimates (charts 9 and 10)

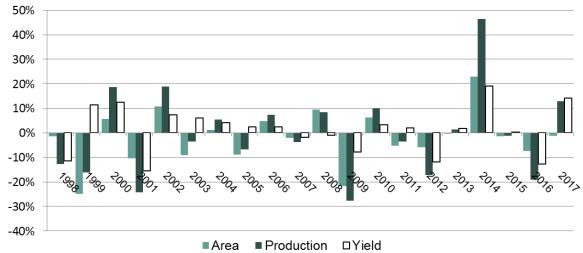
2017 production is estimated to have increased by 13 per cent to 371,000 tonnes. This year's estimated increase has been driven by a 14 per cent increase in yield and slight reduction in area.

Winter barley yields have fluctuated considerably in recent years, often affected by the weather. However, the recent ten-year average is three per cent higher than that of the previous decade. The average yield for winter barley in 2017 is estimated at 7.81 tonnes per hectare, slightly lower than the record highs of 2014 and 2015, but well above the ten-year average of 7.24.

Yield (tonnes Production ('000 tonnes) Area ('00 hectares) per hectare 2003-5003-5004-5005-5005-500 Area ('00 Hectares) ——Production ('000 Tonnes)

Chart 9 - Winter Barley: Area, Yield and Production





4. Wheat

Scottish wheat is mostly soft wheats; used predominantly for distilling, but is also used for animal feed. Scotland imports hard wheats for milling (for bread making) as our climate does not suit hard wheat varieties.

Wheat Estimates (charts 11 and 12)

While the area of wheat production has remained constant in the last few years, production this year is estimated to have increased seven per cent to 988,000 tonnes. Wheat yields were estimated to have risen by seven per cent, less than barley yields probably due to wheat not having been hit so hard in 2016.

Long-term increase in wheat yields has not been as great as in barley, with the latest ten-year period only being two per cent higher than the previous ten years. At 9.02 tonnes per hectare, this year's estimated yield is the third highest on record and considerably above the ten-year average of 8.39.

Chart 11 - Wheat: Area, Yield and Production

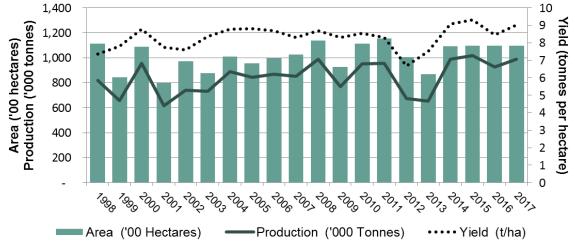
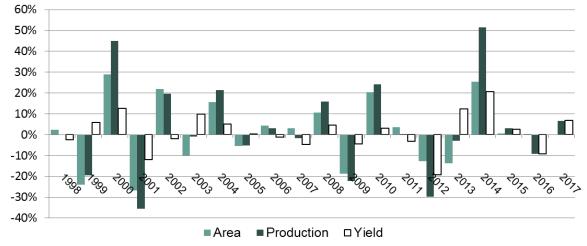


Chart 12 - Wheat Year-on-Year Change: Area, Yield and Production



5. Oats

The majority of oats grown in Scotland are used for milling and further processing for breakfast cereals, oatcakes, porridge oats and oatmeal for secondary processing outwith Scotland. The majority of the remainder is used as specialist feed for horses.

Oats Estimates (charts 13 and 14)

Oat production is estimated to have increased by eight per cent this year due to a five per cent increase in area grown and a three per cent increase in yield. Production has been clearly increasing in recent years, with tonnages in the last two years and 2013 considerably above average. This year's estimate would be the highest since the fall in oat production in the 1970s. Spring oats make up over two thirds of oat production.

This year's average yield is estimated at 6.65 tonnes per hectare, the highest on record, and applied to the highest area since 1989. The increase in yield is in line with the general increasing trend in oat yields, which has seen a seven per cent increase in the average for the last ten years, compared to the previous decade.

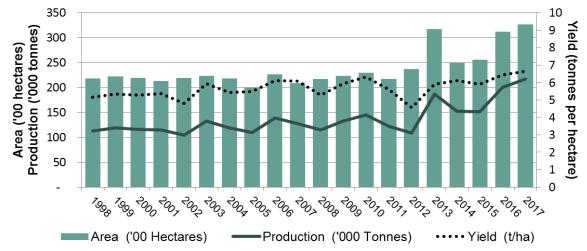


Chart 13 - Oats: Area, Yield and Production

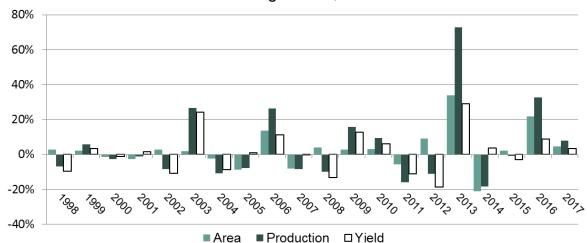


Chart 14 - Oats Year-on-Year Change: Area, Yield and Production

6. Oilseed Rape

The majority of Scottish oilseed rape is winter oilseed rape and is mainly exported for biofuels, with a very small amount processed in Scotland for edible oil.

Oilseed Rape Estimates (charts 15 and 16)

Estimated oilseed rape production in 2017 increased by 38 per cent to 140,000 tonnes, almost recovering from the similarly sized fall last year that was due to bad weather. The increase was due to a 24 per cent increase in yield, and an 11 per cent increase in area. This year's yield is expected to be near the record high of 4.15 seen in 2015.

Over the last 20 years, oilseed rape production has remained relatively stable. This is in part due to a balance between generally decreasing areas grown and general increases in yields achieved. Fluctuations in yield have been more marked in recent years.

Chart 15 - Oilseed Rape: Area, Yield and Production

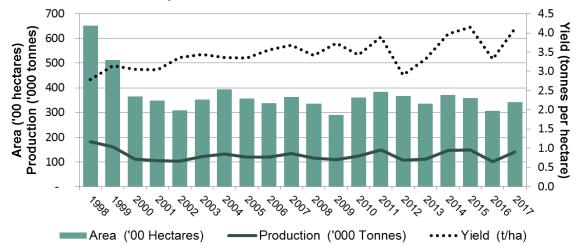
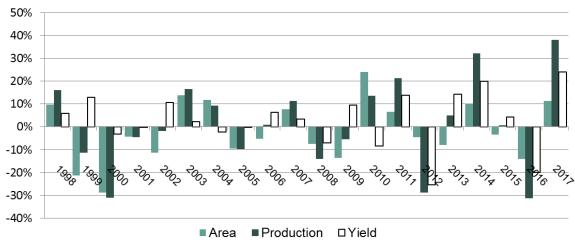


Chart 16 - Oilseed Rape Year-on-Year Change: Area, Yield and Production



7. Methodology and Quality Note

This section provides a summary of information on these statistics against five dimensions of quality, based on the European Statistical System (ESS) quality framework: Relevance; Accuracy; Timeliness and Punctuality; Accessibility and Clarity; and Comparability. The Scottish Government adheres to the Code of Practice for Official Statistics and the National Statistician's guidance on quality. In addition the Scottish Government provides its own guidance on quality, which is available to view at the Scottish Government's Statistics internet pages.

Further information on quality:

- Code of Practice for Official Statistics
- National Statistician's Guidance on Quality
- Scottish Government's Corporate Policy Statement
- Scottish Government Guide to basic quality assurance
- European Statistics Code of Practice (including quality framework)

Data Providers

The Scottish Government relies on the data collected by industry bodies to produce these statistics and therefore the quality of the data available from these sources impacts significantly on Scottish Government analysis.

The provisional estimates are derived from yield values of individual growers collated by several industry bodies. These industry bodies meet to discuss and quality assure these estimates at the annual Crop Report Meeting, which in 2017 was supported by representatives from:

- Scottish Government, Rural and Environment Science and Analytical Services
- Rural Payments Agency
- Bairds Malt
- Scottish Agricultural Organisation Society
- Scotland's Rural College
- Agricultural Industries Confederation
- National Farmers Union Scotland
- The Agriculture and Horticulture Development Board
- Science and Advice for Scottish Agriculture

First estimates from growers are collected by several means, by: area offices of the Scottish Government (SG) Rural Payments and Inspections Directorate (RPID); area offices of Scotland's Rural College (SRUC); agronomists working for commercial bodies; farming co-operatives; the National Farmers Union Scotland (NFUS), using electronic, paper based or telephone surveys.

Once all the yields have been collated, the industry bodies at the Crop Report Meeting carry out additional quality assurance by comparing resulting yields between different crops and regions within Scotland. This results in an agreed set of yield estimates which are then combined with June Agricultural Census area results to derive the harvest production estimates.

Relevance

The degree to which the statistical product meets user needs for both coverage and content.

The cereal estimates are produced for a wide range of purposes. The statistics help the government to form, monitor and evaluate policy, and to assess the economic well-being of the cereal sector. They are also required by law by the Statistical Office of the European Communities, as the information is essential for management of the EU markets. These early provisional estimates are timed to enable provision of data for an EU regulatory deadline.

The production estimates also feed into the <u>UK cereals balance sheet</u>, which provides an independent, unbiased, timely and comprehensive picture of the supply and demand position of the UK cereal market. The balance sheet is also the prime tool for tracking new developments in the UK cereals industry and determining their impact on the market. The balance sheet is widely used by policy makers, the EU Commission and the wider cereals industry.

User Feedback

Though we are not aware of any unmet user needs in relation to these statistics, the Scottish Government is always interested to here from users about what is most relevant to them and welcomes feedback from users of these statistics. Contact details are available from the <u>Agriculture Statistics</u> <u>contacts</u> webpage.

Details of both current and past user consultations are available on the <u>Agriculture Statistics consultations</u> webpage.

Accuracy

The closeness between an estimated result and the (unknown) true value.

When considering the accuracy of these statistics it is important to note that the collection of estimates prior to the completion of the harvest will lead to a level of inaccuracy. Given the timing of the Crop Report Meeting and the unpredictability of the weather and the knock-on effects this has on production (e.g. poorer yields in later harvested crops which have been subjected to longer periods in unfavourable growing conditions), providing early estimates of cereal yields and production is a challenging task. These estimates are based on the most up-to-date industry reports available at the time of the Crop Report Meeting (this year the meeting was held on the 25th September). As harvest progress continues it is inevitable that these reports will become more reliable. These statistics are provisional estimates and will be followed by final estimates in December 2017.

In the last 10 years the provisional estimates of the total cereal harvest has been within five per cent of the final estimate – see chart 17.

The nature of the industry bodies involved in the production of provisional estimates means that the results are likely to be more representative of commercial cropping farms, and less representative of farms growing crops for on farm uses, this is most likely why the provisional estimates tend to overestimate production and yields compared to the final Cereal Production Survey (CPS) estimates.

Comparison of provisional and final results

This section compares past provisional estimates of the harvest to the final estimates of the harvest. Provisional estimates are derived from averaged yield estimates of growers, collated through the cooperation of several organisations within the agricultural sector, applied to crop area estimates from the June Agricultural Census. Final estimates are derived from average yields from the CPS. The purpose of this section is to quantify the size and direction of the differences between the two estimates in order to give an indication of the robustness of these provisional estimates.

The Cereal Production Survey is based on a sample of around 400 to 550 farms in Scotland, stratified by region. In 2016, 630 agricultural holdings were surveyed, with many holdings growing more than one crop. Usable returns were received from 342. The total number of returns received for all crops combined was 691, equating to a sampling rate of five per cent of holdings and nine per cent of the relevant planted area.

The results from the CPS have a margin of error associated with them, reflecting the error resulting from sampling. Sampling error is the difference between the estimate derived from a sample survey and the true value that would result if a census of the whole population were taken under the same conditions. The intervals were calculated as 95 per cent confidence intervals, meaning that there was a 95 per cent chance that the true population value

was within the resulting interval. The 2016 first estimates of overall production were within these limits – suggesting that the provisional estimates were an accurate assessment of the 2016 harvest. More information on the quality of the final estimates and the differences between first and final estimates are contained in the <u>Final Estimates of the Cereal and Oilseed Rape Harvest 2016</u> release.

Final estimates undergo several validation processes as follows; (i) checking for any obvious errors on the paper survey forms upon receipt, (ii) cross checking against June Agricultural Census area data and internal validation within survey forms to ensure totals match, (iii) results are standardised to 14.5 per cent moisture content for cereals and nine per cent for oilseed rape (iv) assessing data for any extreme yield values and removing if necessary, (v) if required, area offices are contacted to ensure that data is correct. Additional quality assurance is provided at the later stages by using expert knowledge within the Scottish Government.

Data quality and assurance measures used for June Census area data are contained in <u>Final Results from 2016 June Agricultural Census</u>.

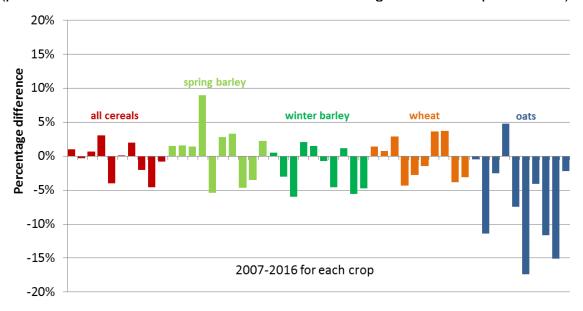
In previous years, the provisional June Agricultural Census area figures used to calculate the provisional production estimates have been slightly different from the final June Agricultural Census areas used to calculate the final production estimates. However, these differences have generally been small (less than one per cent) and are not a main contributor to differences in the production estimates.

The main reason for differences in the provisional and final production estimates are differences in provisional and final yield estimates. Chart 17 shows these differences for the last ten years. A full breakdown of the differences between the estimates is provided in Table 4.

It can be seen from Chart 17 that in the last ten years the provisional estimate of the total cereal harvest has been within five per cent of the final estimate. In most years, the largest differences between provisional and final production estimates are for oats, with the largest difference being 17 per cent in 2012.

Chart 17: Cereal Production, percentage comparison of Provisional v Final Estimates, 2007 to 2016

(positive numbers mean the final estimate was higher than the provisional)



Timeliness and Punctuality

Timeliness refers to the lapse of time between publication and the period to which the data refer.

In order to provide timely estimates of cereal and oilseed rape production the Crop Report Meeting (CRM) is held as early as is practical following data collection by the industry representatives attending the meeting. The progress of the harvest limits how early this meeting can be held. Yield estimates collected before the completion of the harvest are inevitably less reliable than estimates completed after the harvest. The 2017 CRM was held on the 25th September. The results were published under National Statistics protocols on the 4th October.

Punctuality refers to the time lag between the actual and planned dates of publication.

When reliable results can be expected, the planned publication date of the first estimates of the cereal and oilseed rape harvest is scheduled no later than the release date of UK harvest estimates, as both feed into the UK cereals balance sheet.

Accessibility and Clarity

Accessibility is the ease with which users are able to access the data. It also relates to the format(s) in which the data are available and the availability of supporting information.

Clarity refers to the quality and sufficiency of the metadata, illustrations and accompanying advice.

These statistics are made available online at the Scottish Government's statistics website in accessible formats (html and pdf versions are available). Data tables are made available in excel format to allow users to carry out further analysis. Methodological notes and additional notes to tables, identifying specific quality issues, are included in this document, which is available online and linked to from all National Statistics outputs containing cereal production estimates. Links to the Agriculture Statistics series of outputs are available from the Gov.uk website, www.gov.uk.

Comparability

The degree to which data can be compared over time and domain.

The first estimates of the cereal and oilseed rape harvest (from the Crop Report Meeting) contained in this document are compared to final estimates (from the Cereal Production Survey) for previous years.

Due to the typically later harvest period in Scotland compared to the rest of the EC, it is not practical to survey farmers for production and yield estimates at this point in the year. EC regulations governing the collection of cereal and oilseed estimates account for this by allowing early estimates to be collected by other means than a survey. Results for England, Wales and Northern Ireland, also released in October, are based on provisional results from surveys similar to that of the Scottish Cereal Production Survey. The latest results of the UK cereal and oilseed rape harvest, including Scottish estimates, are available from the Gov.uk website, www.gov.uk.

The EC regularly produces estimates of cereal and oilseed production as both totals of EU-27 countries and individual countries. Further information on EC cereal statistics is available at the following website:

http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Agricultural_products are published later than Scottish or UK results due to the additional time required to collate, validate and analyse data from several countries. Users interested in comparing results between countries should evaluate the relevant methodologies of sources used.

Related publications

The final estimates of the 2017 Scottish cereal and oilseed rape harvest are due to be published in December and will be accessed here: <u>Agriculture and Fisheries - Publications</u>

Cereal usage figures have been published in the Economic Report on Scottish Agriculture (ERSA). These were last published in June 2017, and can be accessed here: Agriculture and Fisheries - Publications

Results from all Scottish Government agricultural surveys can be accessed here: Agriculture, Fisheries and Rural - Publications

8. Reference Tables

Table 1: Cereal Area, Yield and Production 2016 and 2017

		2016			2017		% change 2016/2017			
	Area (000 ha)	Yield (t/ha)	Prod. (000 t)	Area (000 ha)	Yield (t/ha)	Prod. (000 t)	Area	Yield	Prod.	
Wheat	110	8.4	926	109	9.0	988	-0.1%	6.8%	6.7%	
Winter Barley	48	6.8	329	48	7.8	371	-1.1%	14.2%	12.9%	
Spring Barley	239	5.4	1,296	244	6.2	1,509	2.1%	14.0%	16.4%	
Total Barley	287	5.7	1,625	291	6.5	1,880	1.5%	13.9%	15.7%	
Oats	31	6.4	201	33	6.7	217	4.5%	3.3%	8.0%	
Total Cereals	428	6.4	2,752	433	7.1	3,085	1.2%	10.8%	12.1%	
Oilseed Rape	31	3.3	102	34	4.1	140	11.3%	24.0%	37.9%	

⁽¹⁾ Basis of Production Estimates. The 2017 estimates of production are based on provisional crop areas from the 2017 June Census, along with crop yield estimates from discussions with industry experts and trade organisations. The 2016 estimates of production are based on final yield results from the 2016 Cereal Production Survey and final crop areas from the 2016 June Census. 2016 figures include a small amount of triticale.

Some caution is advised when comparing these preliminary trends in yield and production estimates between 2016 and 2017 which have been derived from different sources. Final estimates of production from the 2017 harvest will be obtained from the 2017 Cereal Production Survey and published in December 2017.

Table 2: Cereal Area, Yield and Production 1998 to 2017

	T	otal cere	als ⁽¹⁾	Spring barley			V	Vinter bar	ley		Wheat			Oats		
Year	Area	Yield	Production	Area	Yield	Production	Area	Yield	Production	Area	Yield	Production	Area	Yield	Production	
	(Hectare)	(t/ha)	(Tonnes)	(Hectare)	(t/ha)	(Tonnes)	(Hectare)	(t/ha)	(Tonnes)	(Hectare)	(t/ha)	(Tonnes)	(Hectare)	(t/ha)	(Tonnes)	
1998	468,154	5.46	2,556,349	255,822	4.54	1,160,886	77,705	5.89	457,320	111,172	7.37	819,316	21,784	5.16	112,470	
1999	447,236	5.88	2,629,266	280,546	5.20	1,459,163	58,442	6.56	383,414	84,476	7.80	659,177	22,278	5.34	118,971	
2000	448,720	6.34	2,846,939	254,718	5.15	1,311,105	61,678	7.38	455,349	108,853	8.79	956,432	21,927	5.28	115,874	
2001	438,623	6.06	2,656,550	280,786	5.59	1,570,617	55,319	6.24	345,045	79,680	7.74	616,970	21,333	5.37	114,630	
2002	445,512	5.70	2,540,349	263,914	4.85	1,279,984	61,234	6.70	410,268	97,192	7.60	738,662	21,907	4.79	104,897	
2003	431,720	6.63	2,870,410	264,920	6.05	1,603,596	55,649	7.11	395,428	87,498	8.36	731,351	22,340	5.95	132,822	
2004	438,039	6.61	2,904,878	257,462	5.72	1,473,709	56,348	7.40	416,719	101,126	8.78	888,156	21,831	5.44	118,688	
2005	411,329	6.65	2,742,230	243,298	5.74	1,396,231	51,341	7.58	388,938	95,595	8.81	841,744	19,955	5.49	109,505	
2006	398,050	6.87	2,744,088	220,639	5.95	1,313,527	53,762	7.76	417,444	99,681	8.70	867,053	22,682	6.10	138,391	
2007	403,493	6.67	2,699,921	226,019	5.80	1,312,003	52,625	7.63	401,377	102,744	8.30	852,603	20,868	6.08	126,887	
2008	456,547	6.65	3,043,330	262,322	5.72	1,500,118	57,612	7.55	435,085	113,797	8.68	987,256	21,720	5.27	114,515	
2009	447,554	6.44	2,887,132	287,011	5.81	1,668,240	45,149	6.97	314,527	92,482	8.30	767,651	22,299	5.95	132,570	
2010	425,496	6.71	2,857,814	242,364	5.82	1,410,270	48,010	7.20	345,615	111,436	8.55	953,239	23,000	6.31	145,117	
2011	446,181	6.60	2,948,871	262,948	5.83	1,532,979	45,477	7.34	333,623	115,412	8.29	956,985	21,715	5.61	121,826	
2012	456,902	5.48	2,507,016	289,222	5.00	1,446,950	42,816	6.46	276,511	100,637	6.69	673,288	23,672	4.57	108,249	
2013	458,219	6.19	2,836,836	296,444	5.78	1,713,548	42,694	6.57	280,511	86,840	7.52	652,933	31,728	5.89	187,021	
2014	462,123	6.97	3,221,284	274,377	6.07	1,664,905	52,507	7.82	410,765	109,023	9.07	989,347	25,050	6.10	152,924	
2015	443,564	6.99	3,100,624	255,878	5.94	1,520,756	51,808	7.84	406,169	109,562	9.30	1,019,182	25,615	5.92	151,569	
2016	428,348	6.43	2,752,412	238,899	5.43	1,296,481	48,031	6.84	328,766	109,594	8.45	925,992	31,210	6.44	200,936	
2017	433,455	7.12	3,084,971	243,838	6.19	1,508,821	47,502	7.81	371,173	109,492	9.02	988,000	32,624	6.65	216,978	

⁽¹⁾ Includes Triticale up to and including 2016

Lowest value in series

Highest value in series

Table 3: Oilseed rape Area, Yield and Production 1998 to 2017

-	Area	Yield	Production
	(Hectare)	(t/ha)	(Tonnes)
1998	65,117	2.8	181,587
1999	51,173	3.1	161,070
2000	36,406	3.0	110,993
2001	34,850	3.0	105,893
2002	30,901	3.4	103,823
2003	35,163	3.4	120,847
2004	39,316	3.4	131,906
2005	35,591	3.3	119,117
2006	33,743	3.6	120,030
2007	36,334	3.7	133,657
2008	33,623	3.4	114,902
2009	29,043	3.7	108,605
2010	36,002	3.4	123,334
2011	38,388	3.9	149,627
2012	36,611	2.9	106,420
2013	33,653	3.3	111,652
2014	37,073	4.0	147,570
2015	35,797	4.1	148,491
2016	30,731	3.3	101,862
2017	34,188	4.1	140,490

Lowest value in series

Highest value in series

Table 4: Cereals - Comparison of Provisional and Final Estimates 2007 to 2016 (Percentage differences are of Final minus Provisional)

<u>Area</u>																
	Total cereals			Spring barley			Winter barley			Wheat				Oats		
			Percentage			Percentage			Percentage	Percentage					Percentage	
Year	Provisional	Final	Difference	Provisional	Final	Difference	Provisional	Final	Difference	Provisional	Final	Difference	Provisional	Final	Difference	
2007	401,410	403,493	0.5%	224,140	226,019	0.8%	52,860	52,625	-0.4%	101,790	102,744	0.9%	21,520	20,868	-3.0%	
2008	455,830	456,547	0.2%	261,890	262,322	0.2%	57,520	57,612	0.2%	113,649	113,797	0.1%	21,670	21,720	0.2%	
2009	447,554	447,554	0.0%	287,011	287,011	0.0%	45,149	45,149	0.0%	92,482	92,482	0.0%	22,299	22,299	0.0%	
2010	424,492	425,496	0.2%	241,758	242,364	0.3%	47,939	48,010	0.1%	111,269	111,436	0.1%	22,299	23,000	3.1%	
2011	446,181	446,181	0.0%	262,948	262,948	0.0%	45,477	45,477	0.0%	115,412	115,412	0.0%	21,715	21,715	0.0%	
2012	456,901	456,902	0.0%	289,222	289,222	0.0%	42,816	42,816	0.0%	100,637	100,637	0.0%	23,672	23,672	0.0%	
2013	458,219	458,219	0.0%	296,444	296,444	0.0%	42,694	42,694	0.0%	86,840	86,840	0.0%	31,728	31,728	0.0%	
2014	461,477	462,123	0.1%	274,377	274,377	0.0%	52,507	52,507	0.0%	109,023	109,023	0.0%	25,050	25,050	0.0%	
2015	443,127	443,564	0.1%	255,642	255,878	0.1%	51,770	51,808	0.1%	109,476	109,562	0.1%	25,613	25,615	0.0%	
2016	428,348	428,348	0.0%	238,899	238,899	0.0%	48,031	48,031	0.0%	109,594	109,594	0.0%	31,210	31,210	0.0%	

<u>Yield</u>															
	1	otal cereals	3	Spring barley			Winter barley				Wheat				
Year	Provisional	Final	Percentage Difference	Provisional	Final	Percentage Difference	Provisional	Final	Percentage Difference	Provisional	Final	Percentage Difference	Provisional	Final	Percentage Difference
2007	6.61	6.67			5.80			-			8.30	1.4%		6.08	
2008	6.67	6.65	-0.3%	5.63	5.72	1.6%	7.79	7.55	-3.1%	8.61	8.68	0.8%	5.95	5.27	-11.4%
2009	6.40	6.44	0.7%	5.73	5.81	1.4%	7.41	6.97	-6.0%	8.07	8.30	2.9%	6.10	5.95	-2.5%
2010	6.51	6.71	3.0%	5.34	5.82	9.0%	7.05	7.20	2.1%	8.94	8.55	-4.3%	6.02	6.31	4.8%
2011	6.88	6.60	-4.0%	6.16	5.83	-5.4%	7.23	7.34	1.5%	8.53	8.29	-2.8%	6.06	5.61	-7.5%
2012	5.48	5.48	0.1%	4.87	5.00	2.8%	6.51	6.46	-0.8%	6.79	6.69	-1.5%	5.53	4.57	-17.4%
2013	6.07	6.19	2.0%	5.60	5.78	3.3%	6.88	6.57	-4.6%		7.52	3.6%	6.15	5.89	-4.1%
2014	7.11	6.97	-2.0%	6.36	6.07	-4.6%	7.74	7.82	1.1%	8.75	9.07	3.7%	6.91	6.10	-11.6%
2015	7.32	6.99	-4.6%	6.16	5.94	-3.5%	8.30	7.84	-5.6%	9.67	9.30	-3.8%	6.97	5.92	-15.1%
2016	6 47	6 43	-0.8%	5.31	5 43	2 3%	7 19	6 84	-4 7%	8 72	8 45	-3 1%	6 58	6 44	-2 2%

Producti	<u>on</u>														
	Т	otal cereals			Spring barley	У	Winter barley Wheat			Oats					
Year	Provisional	Final	Percentage Difference	Provisional	Final	Percentage Difference	Provisional	Final	Percentage Difference	Provisional	Final	Percentage	Provisional	Final	Percentage Difference
2007	2,653,398	2,699,921	1.8%		1,312,003	2.4%									
2008	3,042,256	3,043,330	0.0%	1,474,441	1,500,118	1.7%	448,081	435,085	-2.9%	978,518	987,256	0.9%	128,937	114,515	-11. 2 %
2009	2,872,228	2,887,132	0.5%	1,645,541	1,668,240	1.4%	334,338	314,527	-5.9%	745,969	767,651	2.9%	135,970	132,570	-2.5%
2010	2,872,228	2,857,814	-0.5%	1,289,851	1,410,270	9.3%	337,987	345,615	2.3%	994,322	953,239	-4.1%	137,657	145,117	5.4%
2011	3,067,714	2,948,871	-3.9%	1,619,867	1,532,979	-5.4%	328,803	333,623	1.5%	984,421	956,985	-2.8%	131,668	121,826	- 7.5 %
2012	2,502,839	2,507,016	0.2%	1,407,715	1,446,950	2.8%	278,613	276,511	-0.8%	683,445	673,288	-1.5%	131,009	108,249	-17.4%
2013	2,781,049	2,836,836	2.0%	1,659,309	1,713,548	3.3%	293,944	280,511	-4.6%	629,963	652,933	3.6%	195,010	187,021	-4.1%
2014	3,282,301	3,221,284	-1.9%	1,745,867	1,664,905	-4.6%	406,166	410,765	1.1%	953,905	989,347	3.7%	173,022	152,924	-11.6%
2015	3,245,525	3,100,624	-4.5%	1,574,132	1,520,756	-3.4%	429,837	406,169	-5.5%	1,059,096	1,019,182	-3.8%	178,430	151,569	-15.1%
2016	2,773,547	2,752,412	-0.8%	1,265,692	1,296,481	2.4%	344,822	328,766	-4.7%	953,196	925,992	-2.9%	205,514	200,936	-2.2%

A National Statistics publication for Scotland

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

Designation can be interpreted to mean that the statistics: meet identified user needs; are produced, managed and disseminated to high standards; and are explained well.

Correspondence and enquiries

For enquiries about this publication please contact: Neil White.

RESAS, Q Spur, Saughton House, Broomhouse Drive, Edinburgh, EH11 3XD,

Telephone: 0300 244 9715, email: agric.stats@gov.scot

For general enquiries about Scottish Government statistics please contact:

Office of the Chief Statistician, Telephone: 0131 244 0442,

email: statistics.enquiries@gov.scot

How to access background or source data

The data collected for this statistical bulletin:
☐ are available in more detail through Scottish Neighbourhood Statistics
☐ are available via an alternative route
☑ may be made available on request, subject to consideration of legal and ethica
factors. Please contact agric.stats@gov.scot for further information.
☐ cannot be made available by Scottish Government for further analysis as
Scottish Government is not the data controller.

Complaints and suggestions

If you are not satisfied with our service or have any comments or suggestions, please write to the Chief Statistician, 3WR, St Andrews House, Edinburgh, EH1 3DG, Telephone: (0131) 244 0302, e-mail <u>statistics.enquiries@gov.scot</u>

If you would like to be consulted about statistical collections or receive notification of publications, please register your interest at www.gov.scot/scotstat
Details of forthcoming publications can be found at www.gov.scot/statistics

ISBN 978-1-78851-284-8 (web only)

Crown Copyright

You may use or re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. See: www.nationalarchives.gov.uk/doc/open-government-licence/

APS Group Scotland, 21 Tennant Street, Edinburgh EH6 5NA PPDAS306326 (09/17)