

KEY POINTS

- Despite an estimated fall in domestic consumption, the wheat balance is the tightest in five seasons.
- Barley surplus remains the lowest since 2012/13, despite a fall in domestic consumption.
- Driven by strong demand, maize imports are forecast to reach a new high in 2018/19.
- Milling demand for oats remains strong.

INTRODUCTION

1. This release covers the second official estimates made of UK cereal supply and demand for 2018/19 (Appendix I).

2. **The UK Cereals Supply and Demand Balance Sheets continue to include the official production figures for all cereals published in the results of [Defra's Cereal and Oilseed Rape Production Survey](#). Find out more about the inclusion of the Defra production figures in the Balance Sheets [here](#).**

3. **Total cereals demand for animal feed in 2018/19 is estimated at 13.284Mt**, slightly lower (47Kt) than November's forecast, but 220Kt (2%) higher than 2017/18. The annual increase in animal feed usage is driven by poultry and ruminant feed output, while pig feed demand is expected to be down on year earlier levels. While ruminant feed production has been up on the year during the first half of the season, the rise has been slowing since October, with production expected to fall on year earlier levels for the rest of the season. However, this is dependent on spring conditions. The decline in pig feed production is expected to slow towards the end of the season with production patterns expected to return back to more usual levels, following the period of hot weather in the summer negatively affecting fertility.

WHEAT

4. **At 17.371Mt, UK wheat availability is 133Kt lower than November's estimate and 1.015Mt (6%) lower than in 2017/18.** Estimated production has reduced, following the publication of the final results of the Defra Cereal and Oilseed Rape Production Survey on 20 December 2018. Final wheat output is now estimated at 13.953Mt, 133Kt lower than the provisional estimate. At 1.700Mt wheat imports are unchanged from November's forecast and 93Kt lower than in 2017/18. From July to December 2018, the UK imported 1.195Mt of wheat, 41% higher than the same period in 2017. The pace of imports during the first quarter of the season was strong, but has slowed somewhat since October. With a reduction in bioethanol demand and competition from maize for animal feed, requirements for wheat imports are expected to be lower than year earlier levels for the rest of the season. Furthermore, imported wheat usage by flour millers is expected to remain lower on

the year partly due to the good functionality and availability of the domestic crop.

5. **Human and Industrial (H&I) consumption of wheat is forecast at 7.024Mt, 43Kt lower than November's estimate and 791Kt down compared with 2017/18.** The decline in usage compared with previous estimates is largely driven by a fall in wheat usage by brewers, maltsters and distillers (BMD), with some plants switching from wheat to maize usage, due to its relative price. In 2018/19, flour production is expected to remain relatively stable on year earlier levels, while extraction rates are forecast to increase marginally, leading to a slight reduction in wheat usage by UK flour millers. Demand for wheat from the bioethanol sector is slightly higher than that forecast in November following the announcement on 27 February that Ensus will resume production in March, which is earlier than previously anticipated. It has been reported that the plant will initially be operating at reduced capacity. Furthermore, while wheat usage is expected to rise slightly compared to previous estimates, the scale of the increase will be capped by an expected rise in maize usage, due to its relative price and availability. Following the announcement that Vivergo Fuels ceased production at the end of September 2018, it is assumed for these forecasts that it will remain offline for the remainder of the season. Bioethanol usage will continue to be monitored closely throughout the rest of the season.

6. **The amount of wheat used for animal feed in 2018/19 is estimated at 7.615Mt**, 122Kt less than November's forecast, but 100Kt higher than in 2017/18. From July to December 2018, wheat used to produce GB compound and integrated poultry unit (IPU) feed totalled 2.457Mt, 2% higher than the same period in 2017. While a continued rise in poultry feed demand is driving the projected annual rise in wheat usage, an overall decline in animal feed production, as well as a higher proportion of maize inclusions has led to the fall in wheat usage in feed compared with previous estimates.

7. **In 2018/19, the balance of availability and domestic consumption is estimated at 2.383Mt, 33Kt more than that forecast in November, but 319Kt (12%) lower than in 2017/18.** The estimated operating stocks requirement remains unchanged from previous estimates at 1.550Mt. This leaves a surplus available for exports or free stock of 833Kt,

267Kt more than in 2017/18, but remains considerably lower than the previous five year average (1.954Mt).

BARLEY

8. **Total availability of barley in 2018/19 is estimated at 7.775Mt, relatively unchanged (+3Kt) from previous estimates, but is 604Kt or 7% lower than in 2017/18.** While Defra's final barley production estimate is 15Kt higher than the provisional at 6.621Mt, imports have been adjusted downwards by 12Kt from November's forecast. UK barley imports totalled 36Kt from July to December 2018, 28% lower than the same period in 2017. Full season barley imports are estimated at 78Kt, 26% lower than in 2017/18.

9. **At 1.873Mt, H&I consumption of barley is forecast to marginally fall on November's estimates (-13Kt) and 2017/18 (-9Kt).** From July to December 2018 BMD usage of barley is 1% lower than the same period in 2017 at 931Kt. During the second half of the season barley usage by the BMD sector is expected to remain similar to year earlier levels, with no large capacity changes or unscheduled closures expected.

10. **Usage of barley in animal feed is estimated at 3.902Mt in 2018/19, 27Kt lower than that forecast in November and 145Kt (4%) down on the year.** Season to date (Jul-Dec) 537Kt of barley has been used in GB compound and IPU feed production, 13% lower than the same period in 2017/18, driven by its relative price to other cereals. However, with the discount of feed barley to feed wheat increasing since mid-January, it is expected that barley inclusions in some diets (pig and ruminant) will increase during the latter part of the season, outweighing some of the projected decline in total animal feed production since previous estimates.

11. **The supply and demand balance for barley in 2018/19 is estimated at 1.781Mt,** 43Kt more than previous estimates, but 447Kt (20%) lower than in 2017/18. With an estimated operating stock requirement of 780Kt, the surplus available for free stock or export is 1.001Mt, 4% higher than that forecast in November, but 407Kt lower on the year.

MAIZE

12. **At 2.588Mt, total availability of maize in 2018/19 is 236Kt higher than that forecast in November and 293Kt more than 2017/18.** The rise in available supplies compared with previous estimates and 2017/18 is driven by a rise in maize imports. So far this season (Jul-Dec) the UK has imported 1.293Mt of maize, 27% higher than the same period in 2017. Full season maize imports are estimated to reach 2.342Mt, 16% higher than the previous season, with the current pace of imports expected to slow somewhat in the last quarter of season.

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13. **In 2018/19 usage of maize by the H&I sectors is estimated at 699Kt, 155Kt higher than previous estimates and 57Kt higher than usage in 2017/18.** With maize pricing more competitively than wheat in some areas, usage of the grain by the BMD sector is expected to increase at the expense of wheat. Likewise, following the announcement that Ensus will resume production in March, maize usage by the bioethanol sector is expected to be higher compared to November's estimates. **At 1.485Mt, the usage of maize in animal feed is 91Kt higher than the previous forecast and 255Kt (21%) more than 2017/18 usage.** From July to December 2018 maize usage in GB animal feed production (including IPU) is 283Kt, 66% higher than the same period in 2017. With reports of commitments up until April, amongst other factors, usage of maize in animal feed is expected to remain firm until the last quarter of the season when it is expected to slow.

14. **The balance of availability and consumption of maize in 2018/19 is estimated to be 10Kt lower than previous estimates and 18Kt less than in 2017/18 at 400Kt.** Full season exports of maize for 2018/19 are forecast at 175Kt, taking account of the export pace to date (Jul-Dec) of 93Kt. Commercial end-season stocks are 30Kt lower than November's estimate and 22Kt down on 2017/18 at 225Kt.

OATS

15. **In 2018/19 oats availability is estimated at 1.026Mt, 1% higher than that forecast in November and 22Kt higher on the year.** Defra's final estimate of production was marginally higher (3Kt) than the provisional at 860Kt. The key change with oats availability compared with earlier estimates is an 11Kt rise in forecast imports to 28Kt, taking account of imports to end-December (23Kt).

16. **At 547Kt, H&I usage of oats in 2018/19 is relatively unchanged from November's estimate and 10Kt higher than last season,** with demand from millers expected to remain strong for the full season. Oats used in animal feed is estimated to be higher on previous estimates and on the season at 283Kt.

17. **The oats balance of supply and demand is estimated at 169Kt,** 4% up on November's estimates and 1% up on 2017/18. UK exports of oats for the season are expected to be marginally higher (2Kt) than 2017/18 at 30Kt, taking account of the 22Kt exported to end-December. At 139Kt, end-season stocks are relatively unchanged from previous estimates.

ADDITIONAL DATA

18. Appendix II shows cumulative usage and trade data to end-December. This release and related information can be found at cereals.ahdb.org.uk/markets.



UK CEREAL SUPPLY AND DEMAND ESTIMATES (a)

Estimates made in February

Background note: The UK Cereals Supply and Demand Balance Sheets continue to include the official production figures for all cereals published in the results of Defra's Cereal and Oilseed Rape Production Survey.

[Find out more about the inclusion of the Defra production figures in the Balance Sheets here.](#)

(JULY - JUNE YEARS)

Links connect to relevant Defra/AHDB data pages

Thousand tonnes

	WHEAT								BARLEY							
	2013/14 2017/18 average	2015/16 estimate**	2016/17 estimate	2017/18 estimate	2018/19 Nov-18	2018/19 Feb-19	Absolute change Nov-18	% change on 17/18	2013/14 2017/18 average	2015/16 estimate	2016/17 estimate	2017/18 estimate	2018/19 Nov-18	2018/19 Feb-19	Absolute change Nov-18	% change on 17/18
(1) Opening Stocks	2,144	2,434	2,787	1,755	1,718	1,718	-	-2%	1,269	1,497	1,367	1,105	1,076	1,076	-	-3%
(2) Production	14,779	16,506	14,383	14,837	14,086	13,953	-133	-6%	7,039	7,370	6,655	7,169	6,606	6,621	15	-8%
(3) Imports	1,804	1,509	1,855	1,793	1,700	1,700	-	-5%	122	159	106	105	90	78	-12	-26%
(4) Total Availability	18,727	20,449	19,025	18,386	17,504	17,371	-133	-6%	8,430	9,026	8,128	8,379	7,772	7,775	3	-7%
(5) Human and Industrial Consumption (b)	7,715	7,360	8,110	7,816	7,067	7,024	-43	-10%	1,897	1,833	1,863	1,881	1,886	1,873	-13	0%
(5a) (of which home grown)	6,585	6,416	7,169	6,787	6,019	5,992	-27	-12%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
(6) Usage as Animal Feed (c)	7,042	7,094	7,236	7,515	7,738	7,615	-122	1%	3,617	3,613	3,655	4,047	3,929	3,902	-27	-4%
(6a) (of which home grown)	6,358	6,444	6,523	6,794	6,988	6,905	-83	2%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
(6b) (of which Compounders)	3,825	3,845	4,034	4,232	4,464	4,370	-93	3%	1,153	1,108	1,132	1,279	1,201	1,143	-58	-11%
(6c) (of which Integrated Poultry Units)	1,297	1,210	1,211	1,241	1,233	1,204	-29	-3%	59	49	53	59	53	50	-3	-16%
(7) Seed (d)	284	281	278	279	279	279	-	0%	178	182	189	186	186	186	-	0%
(8) Other	76	79	72	74	70	70	-	-5%	35	37	33	36	33	33	-	-8%
(9) Total Domestic Consumption	15,117	14,814	15,696	15,683	15,154	14,988	-166	-4%	5,727	5,665	5,740	6,150	6,034	5,994	-40	-3%
(10) Balance (4) - (9)	3,610	5,635	3,329	2,703	2,350	2,383	33	-12%	2,703	3,361	2,388	2,228	1,738	1,781	43	-20%
(11) Exports (e)	1,425	2,848	1,438	448	-	-	-	*	1,355	1,994	1,026	1,101	-	-	-	*
(12) Intervention Stocks (e)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(13) Commercial End-Season Stocks (e)	2,051	2,787	1,755	1,718	-	-	-	*	1,285	1,367	1,105	1,076	-	-	-	*
(14) (of which Estimated Operating stock requirement) (f)	1,522	1,500	1,560	1,600	1,550	1,550	-	-3%	751	760	760	770	780	780	-	1%
(15) (of which free stock) (g)	529	1,287	195	118	-	-	-	*	534	607	345	306	-	-	-	*
(16) Surplus available for either export or free stock (10)-(12)-(14)-(17)	1,954	4,135	1,633	567	800	833	33	47%	1,889	2,601	1,371	1,408	958	1,001	43	-29%
(17) Residual (10)-(11)-(13)			136	536							257	50				

	MAIZE								OATS							
	2013/14 2017/18 average	2015/16 estimate**	2016/17 estimate	2017/18 estimate	2018/19 Nov-18	2018/19 Feb-19	Absolute change Nov-18	% change on 17/18	2013/14 2017/18 average	2015/16 estimate	2016/17 estimate	2017/18 estimate	2018/19 Nov-18	2018/19 Feb-19	Absolute change Nov-18	% change on 17/18
(1) Opening Stocks	241	309	148	271	247	247	-	-9%	109	107	93	110	138	138	-	25%
(2) Production	-	-	-	-	-	-	-	-	855	799	816	875	857	860	3	-2%
(3) Imports	1,993	1,742	2,007	2,024	2,105	2,342	236	16%	35	39	32	19	17	28	11	48%
(4) Total Availability	2,233	2,051	2,155	2,295	2,352	2,588	236	13%	999	945	941	1,004	1,012	1,026	14	2%
(5) Human and Industrial Consumption	585	465	570	643	545	699	155	9%	517	525	521	537	550	547	-3	2%
(5a) (of which home grown)	-	-	-	-	-	-	-	-	482	499	476	519	533	519	-14	0%
(6) Usage as Animal Feed	1,244	1,310	1,135	1,230	1,393	1,485	91	21%	290	239	263	273	272	283	11	4%
(6a) (of which home grown)	-	-	-	-	-	-	-	-	290	239	263	273	272	283	11	4%
(7) Seed	-	-	-	-	-	-	-	-	20	19	23	24	24	24	-	0%
(8) Other (h)	5	9	4	4	4	4	-	0%	4	4	4	4	4	4	-	0%
(9) Total Domestic Consumption	1,833	1,784	1,709	1,877	1,942	2,188	246	17%	831	787	811	837	850	857	8	2%
(10) Balance (4) - (9)	400	267	446	418	410	400	-10	-4%	168	158	130	166	162	169	6	1%
(11) Exportable surplus	153	120	175	171	155	175	20	3%	45	65	21	28	25	30	5	5%
(12) Commercial End-Season Stocks	247	148	271	247	255	225	-30	-9%	123	93	110	138	137	139	2	1%

Due to rounding, totals may not agree with the sum of individual items

(a) These are revised during the year. Figures rounded to the nearest 1000 tonnes.

(b) Defra updated the registry for the UK flour millers survey in spring 2016, the wheat H&I usage has been adjusted to take account of this change.

(c) Animal feed usage has been split by sector. Note, other users are only included in the total.

(d) Seed numbers have been updated based on a number of assumptions, calculated for the purposes of the Balance Sheet only.

(e) Split of exports, intervention and total commercial end-season stocks only published for historical seasons.

(f) Estimated Operating Stocks Requirement is a calculated estimate of the minimum tonnage that users of grain require to get through to a point at which new crop can be utilised.

(g) Free stock is the stock available after both exports and estimated operating stock requirements have been fulfilled.

(h) 2014/15 new format: Maize demand in "Other food use" has been added to the H&I total for maize. This was previously included in the "Other" category.

* Percentage change not meaningful

** These Balance Sheets have been adjusted as per Defra's reliability allocation method

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		OTHER CEREALS (i)								
		2013/14 2017/18 average	2015/16 estimate	2016/17 estimate	2017/18 estimate	2018/19 Nov-18	2018/19 Feb-19	Absolute change Nov-18	% change on 17/18	
(1)	Opening Stocks	5	5	5	5	5	5	-	0%	
(2)	Production	118	121	110	119	194	177	-17	49%	
(3)	Imports	3	3	3	4	4	4	-	0%	
(4)	Total Availability	125	129	118	129	203	186	-17	45%	
(5+6)	H&I and Animal Feed	117	121	110	121	195	178	-17	48%	
(5a+6a)	(of which home grown)	115	118	107	116	191	174	-17	50%	
(7)	Seed	3	3	3	3	3	3	-	0%	
(8)	Other	-	-	-	-	-	-	-	-	
(9)	Total Domestic Consumption	120	124	113	124	198	181	-17	47%	
(10)	Balance (4) - (9)	5	5	5	5	5	5	-	0%	
(11)	Exportable surplus	-	-	-	-	-	-	-	-	
(12)	Intervention Stocks	-	-	-	-	-	-	-	-	
(13)	Commercial End-Season Stocks	5	5	5	5	5	5	-	0%	

		TOTAL CEREALS								
		2013/14 2017/18 average	2015/16 estimate**	2016/17 estimate	2017/18 estimate	2018/19 Nov-18	2018/19 Feb-19	Absolute change Nov-18	% change on 17/18	
(1)	Opening Stocks	3,768	4,352	4,400	3,247	3,184	3,184	-	-2%	
(2)	Production	22,791	24,796	21,964	22,999	21,743	21,611	-132	-6%	
(3)	Imports	3,955	3,452	4,003	3,945	3,917	4,152	235	5%	
(4)	Total Availability	30,515	32,600	30,366	30,191	28,844	28,947	103	-4%	
(5)	H&I (wheat, barley, maize, oats) (h)	10,714	10,183	11,064	10,876	10,048	10,143	96	-7%	
(6)	Animal Feed (wheat, barley, maize oats) (h)	12,192	12,256	12,288	13,065	13,332	13,284	-47	2%	
(5a +6a)	Other cereals (H&I and Animal Feed)	117	121	110	121	195	178	-17	48%	
(7)	Seed	485	485	493	492	492	492	-	0%	
(8)	Other	120	129	113	118	111	111	-	-6%	
(9)	Total Domestic Consumption	23,629	23,174	24,068	24,672	24,178	24,209	31	-2%	
(10)	Balance (4) - (9)	6,886	9,426	6,298	5,520	4,666	4,738	72	-14%	
(11)	Exports	2,979	5,027	2,660	1,749	-	-	-	-100%	
(12)	Intervention Stocks	-	-	-	-	-	-	-	*	
(13)	Commercial End-Season Stocks	3,710	4,400	3,247	3,184	-	-	-	*	
(14)	Estimated Operating stock requirement (wheat & barley only)	2,273	2,260	2,320	2,370	2,330	2,330	-	-2%	
(15)	Free stock for wheat and barley	1,063	1,894	541	424	-	-	-	*	
(16)	Surplus available for either export or free stock (all)	4,041	7,167	3,587	2,563	2,335	2,408	73	-6%	
(17)	Residual (10)-(11)-(13)			392	587					

Due to rounding, totals may not agree with the sum of individual items

Source: AHDB; Defra

(i) Includes mainly rye, triticale and mixed grain.

** These Balance Sheets have been adjusted as per Defra's reliability allocation method

CUMULATIVE MONTHLY STATISTICS
Usage of cereals by processors, external trade and stocks

Situation as at end of December 2018

Thousand tonnes

			2013/14	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	% Change	Actual Change	
			to 2017/18								2018/19 on	2018/19 on	
			Average	26 weeks	26 weeks	26 weeks	26 weeks	26 weeks	26 weeks	26 weeks	2017/18	2017/18	
WHEAT													
Usage	Human and Industrial	-Flour Millers [†]	-imported	591	651	904	656	485	447	463	660	42%	197
			-home-grown	2864	2682	2331	2908	2828	3190	3064	2626	-14%	-439
			-Total	3455	3333	3235	3564	3313	3638	3527	3285	-7%	-242
			-Distillers	388	387	430	393	323	379	414	355	-14%	-59
			Animal Feed Processors ^(a)	1646	1536	1512	1534	1634	1759	1794	1863	4%	70
			Poultry Integrated Units	651	785	714	706	612	606	618	594	-4%	-24
Imports			From July ^(b)	966	1310	1343	952	857	832	845	1195	41%	349
Exports			From July ^(b)	698	512	226	938	991	1065	272	175	-36%	-96
	Intervention		-Actual	0	0	0	0	0	0	0	0	*	*
			-Projected	0	0	0	0	0	0	0	0	*	*
BARLEY													
Usage	Maltsters/Distillers		-imported	-	-	-	-	-	-	-	-	-	-
			-home-grown	-	-	-	-	-	-	-	-	-	-
			-Total	931	903	939	963	901	911	940	931	-1%	-9
			Animal Feed Processors ^(a)	505	442	493	492	496	457	586	508	-13%	-78
			Poultry Integrated Units	30	36	39	27	25	26	33	29	-12%	-4
Imports			From July ^(b)	52	83	43	43	69	52	50	36	-28%	-14
Exports			From July ^(b)	741	307	777	749	858	651	668	405	-39%	-264
	Intervention		-Actual	0	0	0	0	0	0	0	0	*	*
			-Projected	0	0	0	0	0	0	0	0	*	*
MAIZE													
Usage	Human and Industrial			214	149	177	279	169	199	245	**	*	*
			Animal Feed Processors ^(a)	140	93	141	142	139	130	150	261	74%	111
Imports			From July ^(b)	964	734	1115	924	891	872	1018	1293	27%	274
Exports			From July ^(b)	72	26	103	32	52	92	81	93	15%	12
OATS													
Usage	Human and Industrial Processors			256	235	250	241	262	256	274	281	3%	8
			Animal Feed Processors ^(a)	34	36	49	48	28	20	27	40	52%	14
Imports			From July ^(b)	17	33	26	14	21	12	14	23	61%	9
Exports			From July ^(b)	25	6	10	40	43	15	19	22	15%	3

Source: AHDB, Defra, HMRC

^(a) Great Britain only.

^(b) HMRC

* Changes not meaningful

**Insufficient sample to produce robust figure

† Includes bioethanol and starch usage

Footnotes:

Due to rounding, totals may not agree with the sum of the individual items.

There are 53 weeks in the Statistical year 2016. In order to incorporate the change April 16 was increased to a 5 week period compared to 4 weeks in 2015.

Figures in Appendix II were updated on 28 February 2019. The data above may differ from the most recent published data.