

## KEY POINTS

- Higher UK wheat supplies and relatively stable demand has led to a heavy wheat balance. Despite an increase in exports, closing stocks are set to increase substantially.
- Although there has been an increase in domestic usage and exports, higher supplies have led to barley closing stocks reaching a four year high.
- Maize imports remain relatively strong and above the previous five year average.
- Oat exports set to reach a 17 year high on the back of more availability.

## INTRODUCTION

1. This release covers the third official estimates made of UK cereal supply and demand for 2019/20 (Appendix 1).

2. The UK Cereals Supply and Demand Estimates include the official production figures for all cereals published by Defra in the results of the [Cereal and Oilseed Rape Production Survey](#). Please note that the Defra cereal production estimates are standardised to 14.5% moisture content, with production tonnages being adjusted accordingly. Defra are assessing different options available, regarding production and moisture content to take account of the varied climate conditions.

3. **The COVID-19 pandemic and subsequent 'lockdown' measures has had an impact on UK cereal demand since end-March and is expected to continue to have an impact for the remainder of the 2019/20 season.** Animal feed demand is forecast to decrease slightly over the rest of the season (Apr-Jun) driven by a fall in ruminant usage outweighing a rise pig feed. Despite a decline in animal feed demand during the last quarter of the season, cereal usage in animal feed is expected to increase over the whole season. This is driven by an overall rise in pig and poultry demand, as well as a rise in barley and oats fed on farm compared with 2018/19. The pandemic is also expected to have an impact on human and industrial (H&I) demand from April to June. The closure of out of home outlets is expected to have a negative impact on wheat demand from flour millers as well as barley demand by brewers, maltsters and distiller's (BMD). Furthermore, bioethanol demand for both wheat and maize is expected to decrease on previous estimates due to a reduction in domestic fuel usage. These estimates have been made using the best information available to date. However, there may be changes in demand, as COVID-19 lockdown restrictions ease during the final months of the season.

### WHEAT

4. **At 19.186Mt, total availability of wheat is unchanged from February's estimate, but 2.055Mt higher than in 2018/19.** As with previous estimates, the increase in availability is driven by an increase in production and to an extent opening stocks,

outweighing a decline in estimated imports. From July 2019 to March 2020 the UK imported 836Kt of wheat, 45% less than the same period in 2018/19. Full season wheat imports are forecast at 1.050Mt, 808Kt (43%) lower year on year.

5. **H&I consumption of wheat in 2019/20 is estimated at 6.856Mt, 143Kt lower than the previous estimate and 113Kt less than 2018/19 levels.** The decline on February's estimate is largely driven by a fall in demand by flour millers, the bioethanol industry and to an extent a reduction in usage by the BMD sector. While household demand for flour has increased during the COVID-19 pandemic, it has not outweighed the drop in food service demand. With this in mind, demand for wheat by flour millers is forecast to decline somewhat from April to June. Likewise, with less vehicles in use due to the pandemic, fuel consumption is expected to have fallen. With circa 5% of every litre of petrol sold in the UK bioethanol, demand for wheat by the bioethanol sector is expected to decline during the last quarter of the season. It has been reported that some distillers in the UK have pulled forward or extended planned maintenance closures. Therefore, demand for wheat by the BMD sector is also expected to decline.

6. **In 2019/20, wheat usage in animal feed is estimated at 7.402Mt, marginally higher (26Kt) than February's estimate, and unchanged from levels recorded in 2018/19.** From July 2019 to March 2020, GB compounders and integrated poultry units (IPU) used 1.5% more wheat than the same period in 2018/19. A higher proportion of wheat had been used up to March, than was forecast in February. However, during the last quarter of the season, wheat demand is expected to decline slightly, partly due to an overall expected fall in animal feed production. Furthermore, a slightly higher proportion of barley is expected to be used in rations at the expense of wheat due to its relative price.

7. **At 4.566Mt, the balance of total availability and domestic consumption is estimated to be 117Kt higher than the previous forecast and 2.155Mt higher than in 2018/19.** The estimated operating stock requirement has remained unchanged at 1.550Mt. So far this season (Jul-Mar) the UK has exported 1.001Mt of wheat, over three and

a half times higher than the same period in 2018/19. The pace of exports have started to slow somewhat from the start of 2020, and it is expected to continue to slow from April to June. Full season wheat exports are estimated at 1.170Mt, which is over three times more than last season. While exports are expected to be higher, a significant increase in the balance of total availability and domestic consumption has led to an estimated commercial end-season stocks of 3.396Mt, 78% higher than in 2018/19. With potential changes in demand, as COVID-19 lockdown restrictions ease during the final months of the season, there is a level of uncertainty around the actual volume of closing stocks.

## BARLEY

8. **In 2019/20, the total availability of barley is estimated at 9.185Mt, relatively unchanged (-6Kt) from the previous estimate, but 1.528Mt higher year on year.** As with earlier forecasts the rise in availability is driven by an increase in production. Full season imports are forecast at 46Kt, 6Kt lower than February's estimate and 24Kt down year on year.

9. **At 1.813Mt, total H&I consumption of barley is 117Kt lower than the previous estimate and 88Kt less than in 2018/19.** In the season to date (Jul-Mar) the UK BMD sector used 1.424Mt of barley, 1% higher than the same period in 2018/19. From April to June, barley usage by the BMD sector is expected to decline driven by the impact of COVID-19 and the subsequent loss of out of home demand.

10. **The usage of barley in animal feed is 52Kt higher than February's estimate and 547Kt higher than year earlier levels at 4.129Mt.** From July 2019 to March 2020, GB compounders and IPUs used 22% more barley than the same period in 2018/19. While animal feed demand is expected to decline during the latter part of the season, barley inclusions are expected to remain reasonably high due to its relative price compared with other cereals, especially in pig and ruminant rations.

11. **The balance of barley supply and demand is estimated at 3.016Mt, 59Kt higher than the previous estimate and 1.062Mt more than levels recorded in 2018/19.** From July 2019 to March 2020, the UK exported 1.475Mt of barley, double the volume shipped over the same period last season. Full season exports are expected to reach 1.800Mt, 937Kt higher than in 2018/19. Commercial end-season stocks are estimated to be 11% higher on the year at 1.216Mt.

## MAIZE

12. **At 2.601Mt, total availability of maize is slightly lower (-12Kt) than February's estimate, and 471Kt lower than in 2018/19.** So far this season

(Jul-Mar) the UK has imported 1.885Mt of maize, 12% lower year on year. The pace of maize imports during the last quarter of the season is expected to remain relatively stable due to its relative price compared with domestic grain. Full season imports are estimated at 2.288Mt, 19% lower than levels recorded in 2018/19.

13. **In 2019/20 H&I demand for maize is estimated at 799Kt, 69Kt lower than the previous estimate, but relatively unchanged on the year.** The decline on February's estimate is driven by a reduction in bioethanol and to a lesser extent BMD usage. **At 1.360Mt, usage of maize in animal feed is 33Kt higher than previous estimates, but 14% lower year on year.** While maize usage in animal feed is expected to fall on the year, it hasn't fallen back to levels recorded before 2018/19, when maize inclusions were at higher levels due to its relative price to domestic grain. Furthermore, maize usage is expected to remain strong in animal feed rations in Northern Ireland.

14. **The supply and demand balance of maize is estimate at 439Kt, 24Kt higher than February's forecast, but 257Kt lower than in 2018/19.** Exports are estimated at 139Kt, 26% lower year on year, with closing stocks forecast to be 13Kt lower than in 2018/19 at 300Kt.

## OATS

15. **In 2019/20, total availability of oats is relatively unchanged from the previous estimate, but 186Kt higher than in 2018/19, driven by an increase in production.** Full season imports are estimated at 14Kt, 6Kt lower than February's estimate and 18Kt lower year on year.

16. **At 534Kt, H&I usage of oats in 2019/20 is relatively unchanged from the previous forecast and on year earlier levels. The usage of oats in animal feed is expected to be similar to that forecast in February and 16% higher year on year.** Compared with year earlier levels, more oats are expected to be fed on farm, due to considerably larger domestic availability.

17. **The balance of oats total availability and domestic consumption is estimated at 291Kt, 11Kt lower than February's estimate, but 138Kt higher than in 2018/19.** From July 2019 to March 2020 the UK exported 104Kt of oats, with full season exports forecast to reach 125Kt, more than three times the volume shipped in 2018/19. End-season stocks are estimated at 166Kt, 14Kt lower than previous estimates, 50Kt higher than last season.

18. Appendix II shows cumulative usage and trade data to end-March. This release and related information can be found at [ahdb.org.uk/cereals-oilseeds-markets](http://ahdb.org.uk/cereals-oilseeds-markets).

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Appendix I

UK CEREAL SUPPLY AND DEMAND ESTIMATES <sup>(a)</sup>

Estimates made in May 2020

July to June crop years

Thousand tonnes

	WHEAT								BARLEY							
	2014/15 2018/19 average	2016/17 estimate	2017/18 estimate	2018/19 estimate	2019/20 Feb-20	2019/20 May-20	Absolute change Feb-20	% change on 18/19	2014/15 2018/19 average	2016/17 estimate	2017/18 estimate	2018/19 estimate	2019/20 Feb-20	2019/20 May-20	Absolute change Feb-20	% change on 18/19
(1) Opening stocks	2,051	2,787	1,755	1,718	1,911	1,911	-	11%	1,285	1,367	1,105	1,076	1,091	1,091	-	1%
(2) Production	15,129	14,383	14,837	13,555	16,225	16,225	-	20%	6,923	6,655	7,169	6,510	8,048	8,048	-	24%
(3) Imports	1,737	1,855	1,793	1,858	1,050	1,050	-	-43%	116	106	105	70	52	46	-6	-35%
(4) Total availability	18,916	19,025	18,386	17,131	19,186	19,186	-	12%	8,324	8,128	8,379	7,657	9,191	9,185	-6	20%
(5) Human and industrial consumption (b)	7,612	8,110	7,792	6,969	6,999	6,856	-143	-2%	1,885	1,863	1,881	1,901	1,930	1,813	-117	-5%
(5a) (of which home grown)	6,581	7,169	6,765	5,918	6,147	6,086	-61	3%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
(6) Usage as animal feed (c)	7,247	7,236	7,514	7,402	7,375	7,402	26	0%	3,634	3,655	4,046	3,582	4,077	4,129	52	15%
(6a) (of which home grown)	6,582	6,523	6,792	6,652	6,868	6,897	28	4%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
(6b) (of which compounders)	3,982	4,034	4,232	4,164	4,193	4,180	-13	0%	1,120	1,132	1,278	1,172	1,327	1,388	62	18%
(6c) (of which integrated poultry units)	1,249	1,211	1,241	1,155	1,126	1,165	39	1%	52	53	59	50	50	41	-10	-19%
(7) Seed (d)	280	278	271	281	281	281	-	0%	184	189	183	187	187	187	-	0%
(8) Other	76	72	74	68	81	81	-	19%	35	33	36	33	40	40	-	21%
(9) Total domestic consumption	15,216	15,696	15,651	14,720	14,736	14,620	-117	-1%	5,738	5,740	6,147	5,703	6,234	6,169	-65	8%
(10) Balance (4) - (9)	3,700	3,329	2,735	2,411	4,449	4,566	117	89%	2,585	2,388	2,232	1,954	2,958	3,016	59	54%
(11) Exports (e)	1,410	1,438	448	358	-	1,170	*	227%	1,296	1,026	1,101	863	-	1,800	*	109%
(12) Intervention stocks (e)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(13) Commercial end-season stocks (e)	2,121	1,755	1,718	1,911	-	3,396	*	78%	1,227	1,105	1,076	1,091	-	1,216	*	11%
(14) (of which estimated operating stock requirement) (f)	1,542	1,560	1,600	1,550	1,550	1,550	-	0%	764	760	770	780	790	790	-	1%
(15) (of which free stock) (g)	579	195	118	361	-	1,846	*	411%	463	345	306	311	-	426	*	37%
(16) Surplus available for either export or free stock (10)-(12)-(14)-(17)	1,989	1,633	567	720	2,899	3,016	117	319%	1,759	1,371	1,408	1,174	2,168	2,226	59	90%
(17) Residual (10)-(11)-(13)	-	136	568	142	-	-	-	-	-	257	54	-	-	-	-	-

	MAIZE								OATS							
	2014/15 2018/19 average	2016/17 estimate	2017/18 estimate	2018/19 estimate	2019/20 Feb-20	2019/20 May-20	Absolute change Feb-20	% change on 18/19	2014/15 2018/19 average	2016/17 estimate	2017/18 estimate	2018/19 estimate	2019/20 Feb-20	2019/20 May-20	Absolute change Feb-20	% change on 18/19
(1) Opening stocks	247	148	271	247	313	313	-	27%	123	93	110	138	116	116	-	-16%
(2) Production	-	-	-	-	-	-	-	-	832	816	875	850	1,076	1,076	-	26%
(3) Imports	2,091	2,007	2,024	2,825	2,300	2,288	-12	-19%	32	32	19	32	20	14	-6	-56%
(4) Total availability	2,338	2,155	2,295	3,072	2,614	2,601	-12	-15%	987	941	1,004	1,020	1,212	1,206	-6	18%
(5) Human and industrial consumption	609	570	643	800	868	799	-69	0%	522	521	537	536	530	534	4	0%
(5a) (of which home grown)	-	-	-	-	-	-	-	-	489	476	519	500	512	520	8	4%
(6) Usage as animal feed	1,278	1,135	1,230	1,573	1,327	1,360	33	-14%	281	263	273	302	349	351	1	16%
(6a) (of which home grown)	-	-	-	-	-	-	-	-	281	263	273	302	349	351	1	16%
(7) Seed	-	-	-	-	-	-	-	-	22	23	24	25	25	25	-	0%
(8) Other (h)	5	4	4	4	4	4	-	0%	4	4	4	4	5	5	-	25%
(9) Total domestic consumption	1,892	1,709	1,877	2,377	2,199	2,162	-36	-9%	829	811	837	867	909	915	5	5%
(10) Balance (4) - (9)	445	446	418	696	415	439	24	-37%	158	130	166	153	302	291	-11	90%
(11) Exportable surplus	149	175	171	188	145	139	-6	-26%	46	21	28	37	122	125	3	237%
(12) Commercial end-season stocks	258	271	247	313	270	300	30	-4%	113	110	138	116	180	166	-14	43%
(13) Residual (10)-(11)-(12)	-	-	-	194	-	-	-	-	-	-	-	-	-	-	-	-

Links connect to relevant Defra/AHDB data pages

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 sheets 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.

\* Change not meaningful

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		OTHER CEREALS (i)							Absolute change Feb-20	% change on 18/19
		2014/15 2018/19 average	2016/17 estimate	2017/18 estimate	2018/19 estimate	2019/20 Feb-20	2019/20 May-20			
(1)	Opening stocks	5	5	5	5	5	5	-	0%	
(2)	Production	130	110	119	169	168	168	-	-1%	
(3)	Imports	3	3	4	3	3	3	-	1%	
<b>(4)</b>	<b>Total availability</b>	<b>138</b>	<b>118</b>	<b>129</b>	<b>177</b>	<b>176</b>	<b>176</b>	-	-1%	
(5+6)	H&I and animal feed	130	110	121	169	168	168	-	-1%	
(5a+6a)	(of which home grown)	127	107	116	166	165	165	-	-1%	
(7)	Seed	3	3	3	3	3	3	-	0%	
(8)	Other	-	-	-	-	-	-	-	-	
<b>(9)</b>	<b>Total domestic consumption</b>	<b>133</b>	<b>113</b>	<b>124</b>	<b>172</b>	<b>171</b>	<b>171</b>	-	-1%	
<b>(10)</b>	<b>Balance (4) - (9)</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	-	-1%	
(11)	Exportable surplus	-	-	-	-	-	-	-	-	
(12)	Intervention stocks	-	-	-	-	-	-	-	-	
<b>(13)</b>	<b>Commercial end-season stocks</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	-	5%	

		TOTAL CEREALS							Absolute change Feb-20	% change on 18/19
		2014/15 2018/19 average	2016/17 estimate	2017/18 estimate	2018/19 estimate	2019/20 Feb-20	2019/20 May-20			
(1)	Opening stocks	3,710	4,400	3,247	3,184	3,437	3,437	-	8%	
(2)	Production	23,014	21,964	22,999	21,085	25,517	25,517	-	21%	
(3)	Imports	3,978	4,003	3,945	4,789	3,425	3,401	-24	-29%	
<b>(4)</b>	<b>Total availability</b>	<b>30,702</b>	<b>30,366</b>	<b>30,191</b>	<b>29,058</b>	<b>32,379</b>	<b>32,354</b>	<b>-24</b>	<b>11%</b>	
(5)	H&I (wheat, barley, maize, oats) (h)	10,630	11,064	10,853	10,206	10,327	10,002	-325	-2%	
(6)	Animal feed (wheat, barley, maize oats) (h)	12,448	12,288	13,064	12,858	13,128	13,241	112	3%	
(5a +6a)	Other cereals (H&I and animal feed)	130	110	121	169	168	168	-	-1%	
(7)	Seed	489	493	481	496	496	496	-	0%	
(8)	Other	120	113	118	109	130	130	-	19%	
(9)	Total domestic consumption	23,817	24,068	24,636	23,838	24,249	24,036	-213	1%	
<b>(10)</b>	<b>Balance (4) - (9)</b>	<b>6,885</b>	<b>6,298</b>	<b>5,556</b>	<b>5,220</b>	<b>8,130</b>	<b>8,318</b>	<b>188</b>	<b>59%</b>	
(11)	Exports	2,901	2,660	1,749	1,446	-	3,234	*	124%	
(12)	Intervention stocks	-	-	-	-	-	-	-	-	
<b>(13)</b>	<b>Commercial end-season stocks</b>	<b>3,724</b>	<b>3,247</b>	<b>3,184</b>	<b>3,437</b>	<b>-</b>	<b>5,083</b>	<b>*</b>	<b>48%</b>	
(14)	Estimated operating stock requirement (wheat & barley only)	2,306	2,320	2,370	2,330	2,340	2,340	-	0%	
(15)	Free stock for wheat and barley	1,042	541	424	673	-	2,272	*	238%	
<b>(16)</b>	<b>Surplus available for either export or free stock (all)</b>	<b>4,318</b>	<b>3,587</b>	<b>2,563</b>	<b>2,553</b>	<b>5,789</b>	<b>5,978</b>	<b>188</b>	<b>134%</b>	
<b>(17)</b>	<b>Residual (10)-(11)-(13)</b>		<b>392</b>	<b>623</b>	<b>337</b>					

Source: AHDB, Defra

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

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



## Appendix II

## CUMULATIVE MONTHLY STATISTICS

## Usage of cereals by processors, external trade and stocks

Situation as at end of March 2020

Thousand tonnes

		2014/15 to 2018/19 average	2013/14 39 weeks	2014/15 39 weeks	2015/16 39 weeks	2016/17 39 weeks	2017/18 39 weeks	2018/19 39 weeks	2019/20 39 weeks	% Change 2019/20 on 2018/19	Actual Change 2019/20 on 2018/19
<b>WHEAT</b>											
Usage	Flour millers <sup>(1)</sup>	5,030	4,790	5,183	4,831	5,356	5,103	4,677	4,604	-2%	-73
	of which home-grown	4,265	3,642	4,270	4,125	4,679	4,422	3,831	4,025	5%	194
	of which imported	765	1,149	914	707	677	681	846	579	-32%	-267
	Brewers, maltsters and distillers	552	619	584	465	546	635	527	**	*	*
	Animal Feed Processors <sup>(2)</sup>	3,518	3,237	3,381	3,365	3,536	3,656	3,653	3,708	2%	55
	of which feed compounders	2,588	2,192	2,326	2,472	2,631	2,730	2,782	2,823	1%	41
Imports	of which intergrated poultry units	930	1,045	1,055	893	905	927	871	885	2%	14
	From July <sup>(3)</sup>	1,281	1,677	1,253	1,169	1,260	1,214	1,510	836	-45%	-675
Exports	From July <sup>(3)</sup>	1,104	353	1,580	1,966	1,315	383	275	1,001	264%	726
<b>BARLEY</b>											
Usage	Brewers, maltsters and distillers	1,386	1,414	1,398	1,346	1,372	1,404	1,411	1,424	1%	13
	Animal Feed Processors <sup>(2)</sup>	820	849	784	813	775	939	788	960	22%	173
	of which feed compounders	779	786	746	775	736	891	750	929	24%	180
	of which intergrated poultry units	40	63	38	38	39	48	38	31	-18%	-7
Imports	From July <sup>(3)</sup>	73	66	77	86	74	70	56	40	-27%	-15
Exports	From July <sup>(3)</sup>	1,054	1,033	1,174	1,536	860	964	737	1,475	100%	738
<b>MAIZE</b>											
Usage	Human and Industrial	**	275	365	312	289	257	**	**	*	*
	Animal Feed Processors <sup>(2)</sup>	300	351	271	254	235	264	476	339	-29%	-137
	of which feed compounders	259	260	214	211	200	232	438	287	-34%	-151
	of which intergrated poultry units	41	92	56	44	34	32	38	52	37%	14
Imports	From July <sup>(3)</sup>	1,565	1,896	1,473	1,285	1,380	1,551	2,136	1,885	-12%	-252
Exports	From July <sup>(3)</sup>	115	187	70	83	141	137	144	108	-25%	-36
<b>OATS</b>											
Usage	Human and Industrial	394	384	362	392	394	410	410	415	1%	4
	Animal Feed Processors <sup>(2)</sup>	48	89	74	41	30	43	53	48	-10%	-5
Imports	From July <sup>(3)</sup>	21	34	21	22	19	16	28	12	-57%	-16
Exports	From July <sup>(3)</sup>	41	32	70	61	18	23	32	104	223%	72

Source: AHDB, Defra, HMRC

<sup>(1)</sup> Includes bioethanol and starch usage<sup>(2)</sup> Great Britain only<sup>(3)</sup> HMRC

\* Changes not meaningful

\*\*Insufficient sample to produce robust figure

## Notes

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

There are 53 weeks in the statistical year 2020. In order to incorporate the change January 2020 was increased to a 5 week period compared to 4 weeks in 2019.

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 May 2020. The data above may differ from the most recent published data.

## Disclaimer

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