SUPPLY AND DEMAND

26 September 2024

AHDB

SUMMARY OF REVISIONS

The tables below provide estimates of UK cereals supply and demand for the 2023/24 season (July – June). For the 2023/24 wheat, barley and maize balance sheets, residuals have been identified and for the oats balance sheet, a deficit has been identified. This is after the full season official statistics have been taken into account, stated in Appendix 1.

The **main revisions** from May's estimates and comparisons with the 2022/23 season are summarised below.

END-SEASON 2023/24 UK CEREAL SUPPLY AND DEMAND

WHEAT

- **Trade** – In 2023/24, the UK imported 2.437 Mt of wheat, 1.076 Mt more than in the previous season, and 262 Kt more than estimated in May. At 258 Kt, full season exports are estimated down 1.328 Mt on the year, but up 33 Kt on May's estimate.
- **Availability** – Total availability in 2023/24 reached 18.369 Mt, down 319 Kt on the previous year, but 262 Kt more than May's estimate. Despite a smaller crop, greater opening stocks and the highest level of imports since 2012/13 saw a rise in available supplies.
- **Usage** – At 14.967 Mt, total domestic consumption in 2023/24 was up 390 Kt on the year. It is also 130 Kt greater than May's estimate, driven by some modest recovery in the feed industry.
- **Closing stocks** – Due to the highly unusual nature of the 2023/24 season, an adjusted commercial end-season stocks figure is estimated at 2.987 Mt. This is 58 Kt lower than May's estimate, but 1.034 Mt more than in 2022/23.

BARLEY

- **Trade** – At 201 Kt, imports of barley in 2023/24 reached their highest level since 2012/13. This was up 56 Kt from May's estimate and up 113 Kt year on year.
- **Availability** – Availability of barley was estimated at 8.433 Mt in 2023/24, 56 Kt higher than that estimated in May, but down slightly (4 Kt) on the year.
- **Usage** – Totalling 6.324 Mt, domestic consumption of barley was up 180 Kt on the previous year, and 107 Kt on May's estimate. Barley usage in animal feed was up 247 Kt year on year.
- **Closing stocks** – Due to the highly unusual nature of this season, an adjusted ending stocks figure of 1.218 Mt was used, down 51 Kt on the year, and 213 Kt lower than May's estimate.

OATS

- **Trade** – At 15 Kt, oat imports were 2 Kt higher than the previous estimate, but 2 Kt lower on the year. In 2023/24, due to limited supplies, exports totalled 116 Kt, down 14 Kt on May's forecast, and 56 Kt lower than 2022/23 levels.
- **Availability** – A smaller crop, reduced imports and fewer carry-in stocks saw total availability of oats at 985 Kt. This is 197 Kt lower on the year, but slightly up (2 Kt) on May's estimate.
- **Usage** –Total domestic consumption of oats in 2023/24 totalled 780 Kt. This is down 18 Kt on May's estimate, and 90 Kt less than 2022/23 levels. This is largely due to declines in animal feed demand outweighing a small increase in H&I usage.
- **Closing stocks** – End-season stocks of oats are estimated at 125 Kt, 70 Kt higher than estimated in May, but down 15 Kt on year earlier levels.

MAIZE

- **Trade** – In 2023/24, the UK imported 2.642 Mt of maize, 244 Kt more than estimated in May, due to its increased attractiveness in price against domestic grains. This is also up 519 Kt on the year.
- **Availability** – At 2.787 Mt, total availability of maize for 2023/24 is up 263 Kt from May's estimate and 416 Kt higher than levels recorded in 2022/23, driven mainly by increased imports.
- **Usage** – Full season domestic consumption of maize is estimated at 2.266 Mt. This is up 106 Kt from May's estimate, and an increase of 227 Kt on the year.
- **Closing stocks** – At 200 Kt, maize closing stocks are down 15 Kt on May's forecast, but up 55 Kt on 2022/23 levels.

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AHDB

Appendix I

UK CEREAL SUPPLY AND DEMAND ESTIMATES [(a)]

Estimates made in September 2024

July to June crop years — **Thousand tonnes**

WHEAT

		2018/19 2022/23 average	2020/21 estimate	2021/22 estimate	2022/23 estimate	2023/24 May-24	2023/24 Sep-24	Absolute change May-24	% change on 22/23
(1)	Opening stocks	1,854	2,438	1,413	1,788	1,953	1,953	-	9%
(2)	Production	13,793	9,658	13,988	15,540	13,980	13,980	-	-10%
(3)	Imports	1,740	2,431	1,994	1,360	2,175	2,437	262	79%
(4)	**Total availability**	**17,387**	**14,527**	**17,394**	**18,688**	**18,108**	**18,369**	**262**	**-2%**
(5)	Human and industrial consumption	7,000	6,617	7,156	7,326	7,467	7,499	32	2%
(5a)	(of which home grown)	5,936	5,131	6,056	6,407	6,320	6,320	-0	-1%
(6)	Usage as animal feed (b)	7,045	6,115	7,242	6,906	7,034	7,131	98	3%
(6a)	(of which home grown)	6,421	5,365	6,542	6,486	6,484	6,381	-102	-2%
(6b)	(of which compounders)	3,990	3,654	4,043	3,771	3,758	3,800	42	1%
(6c)	(of which integrated poultry units)	1,134	1,080	1,143	1,104	1,259	1,225	-34	11%
(7)	Seed (c)	264	278	280	267	267	267	-	-
(8)	Other	69	48	70	78	70	70	-	-10%
(9)	**Total domestic consumption**	**14,378**	**13,058**	**14,748**	**14,577**	**14,837**	**14,967**	**130**	**3%**
(10)	**Balance (4) - (9)**	**3,008**	**1,469**	**2,646**	**4,111**	**3,270**	**3,402**	**131**	**-17%**
(11)	Exports (d)	774	209	511	1,586	225	258	33	-84%
(12)	Intervention stocks (d)	-	-	-	-	-	-	-	-
(13)	**Commercial end-season stocks (d)**	**1,901**	**1,413**	**1,788**	**1,953**	**3,045**	**2,987**	**-58**	**53%**
(14)	(of which estimated operating stock requirement) (e)	1,520	1,500	1,500	1,500	1,500	1,500	-	-
(15)	(of which free stock) (f)	381	-87	288	453	1,545	1,487	-58	228%
(16)	**Surplus available for either export or free stock (10)-(12)-(14)-(18)**	**1,154**	**122**	**799**	**2,038**	**1,770**	**1,745**	**-25**	**-14%**
(17)	**2020/21 operating stock deficit (13)-(14)****		**-87**						
(18)	**Residual (10)-(11)-(13)**		**-153**	**347**	**573**		**157**		

BARLEY

		2018/19 2022/23 average	2020/21 estimate	2021/22 estimate	2022/23 estimate	2023/24 May-24	2023/24 Sep-24	Absolute change May-24	% change on 22/23
(1)	Opening stocks	1,109	1,357	1,058	964	1,268	1,268	-	32%
(2)	Production	7,404	8,117	6,961	7,385	6,963	6,963	-	-6%
(3)	Imports	81	89	89	88	145	201	56	128%
(4)	**Total availability**	**8,595**	**9,562**	**8,108**	**8,437**	**8,377**	**8,433**	**56**	**0%**
(5)	Human and industrial consumption	1,854	1,722	1,885	1,983	1,964	1,917	-47	-3%
(5a)	(of which home grown)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
(6)	Usage as animal feed (b)	4,243	5,312	4,237	3,941	4,034	4,188	154	6%
(6a)	(of which home grown)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
(6b)	(of which compounders)	1,471	1,890	1,553	1,342	1,424	1,396	-27	4%
(6c)	(of which integrated poultry units)	80	147	83	74	90	92	2	25%
(7)	Seed (c)	191	185	178	183	183	183	-	-
(8)	Other	37	41	35	37	35	35	-	-5%
(9)	**Total domestic consumption**	**6,325**	**7,260**	**6,335**	**6,144**	**6,216**	**6,324**	**107**	**3%**
(10)	**Balance (4) - (9)**	**2,270**	**2,302**	**1,773**	**2,293**	**2,161**	**2,110**	**-51**	**-8%**
(11)	Exports (d)	1,166	1,290	764	1,123	730	780	50	-31%
(12)	Intervention stocks (d)	-	-	-	-	-	-	-	-
(13)	**Commercial end-season stocks (d)**	**1,148**	**1,058**	**964**	**1,268**	**1,431**	**1,218**	**-213**	**-4%**
(14)	(of which estimated operating stock requirement) (e)	790	780	800	800	800	800	-	-
(15)	(of which free stock) (f)	358	278	164	468	631	418	-213	-11%
(16)	**Surplus available for either export or free stock (10)-(12)-(14)-(18)**	**1,524**	**1,568**	**928**	**1,592**	**1,361**	**1,197**	**-163**	**-25%**
(17)	**2020/21 operating stock deficit (13)-(14)****								
(18)	**Residual (10)-(11)-(13)**		**-46**	**45**	**-98**		**112**		

MAIZE

		2018/19 2022/23 average	2020/21 estimate	2021/22 estimate	2022/23 estimate	2023/24 May-24	2023/24 Sep-24	Absolute change May-24	% change on 22/23
(1)	Opening stocks	248	222	211	248	126	145	19	-42%
(2)	Production	-	-	-	-	-	-	-	-
(3)	Imports	2,477	2,856	2,207	2,123	2,398	2,642	244	24%
(4)	**Total availability**	**2,726**	**3,078**	**2,417**	**2,371**	**2,524**	**2,787**	**263**	**18%**
(5)	Human and industrial consumption	854	1,011	859	801	905	919	14	15%
(5a)	(of which home grown)	-	-	-	-	-	-	-	-
(6)	Usage as animal feed	1,375	1,536	1,172	1,234	1,251	1,343	92	9%
(6a)	(of which home grown)	-	-	-	-	-	-	-	-
(7)	Seed	-	-	-	-	-	-	-	-
(8)	Other (h)	4	4	4	4	4	4	-	-
(9)	**Total domestic consumption**	**2,233**	**2,551**	**2,035**	**2,039**	**2,159**	**2,266**	**106**	**11%**
(10)	**Balance (4) - (9)**	**492**	**527**	**383**	**332**	**365**	**522**	**157**	**57%**
(11)	Exportable surplus	145	138	134	131	150	167	17	27%
(12)	**Commercial end-season stocks**	**228**	**211**	**248**	**145**	**215**	**200**	**-15**	**38%**
(13)	**Residual (10)-(11)-(12)**		**178**	**0**	**56**		**154**		

OATS

		2018/19 2022/23 average	2020/21 estimate	2021/22 estimate	2022/23 estimate	2023/24 May-24	2023/24 Sep-24	Absolute change May-24	% change on 22/23
(1)	Opening stocks	133	106	147	157	140	140	-	-11%
(2)	Production	1,017	1,031	1,123	1,007	830	830	-	-18%
(3)	Imports	21	20	17	18	13	15	2	-12%
(4)	**Total availability**	**1,171**	**1,157**	**1,287**	**1,182**	**983**	**985**	**2**	**-17%**
(5)	Human and industrial consumption	523	531	501	492	497	501	4	2%
(5a)	(of which home grown)	501	513	483	474	484	486	2	3%
(6)	Usage as animal feed	374	394	476	350	274	252	-23	-28%
(6a)	(of which home grown)	374	394	476	350	274	252	-23	-28%
(7)	Seed	26	28	24	23	23	23	-	-
(8)	Other (h)	5	5	6	5	4	4	-	-20%
(9)	**Total domestic consumption**	**927**	**958**	**1,007**	**870**	**798**	**780**	**-18**	**-10%**
(10)	**Balance (4) - (9)**	**244**	**199**	**280**	**312**	**185**	**206**	**21**	**-34%**
(11)	Exportable surplus	99	41	123	172	130	116	-14	-32%
(12)	**Commercial end-season stocks**	**133**	**147**	**157**	**140**	**55**	**125**	**70**	**-11%**
(13)	**Residual (10)-(11)-(12)**		**11**	**0**	**0**		**-35**		

Links connect to relevant Defra/AHDB data pages

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

* Change not meaningful

** Due to the highly unusual nature of the 2020/21 seasons hugely reduced wheat production figure, an extra line is included in the balance sheet to show the operating stock deficit.

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

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

(c) Seed numbers are updated based on a number of assumptions, calculated for the purposes of the balance sheets only. Seed numbers for the 2023/24 season are pulled forward from the last marketing year.

Given the decrease in wheat area and increase in barley area forecast for harvest 2024, significant changes to this figure can be expected when official data is released early next season.

(d) Split of exports, intervention and total commercial end-season stocks only published for historical seasons. Due to the highly unusual nature of the 2023/24 season, an adjusted comercial end-season stocks figure has been used in the wheat and barley balance sheets.

(e) 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.

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

		OTHER CEREALS (i)							
		2018/19 2022/23 average	2020/21 estimate	2021/22 estimate	2022/23 estimate	2023/24 May-24	2023/24 Sep-24	Absolute change May-24	% change on 22/23
(1)	Opening stocks	6	5	5	10	6	6	-	-41%
(2)	Production****	227	168	297	330	271	271	-	-18%
(3)	Imports	4	1	11	4	4	5	1	4%
(4)	**Total availability**	**237**	**174**	**313**	**345**	**281**	**282**	**1**	-18%
(5+6)	H&I and animal feed	219	166	289	300	260	262	2	-13%
(5a+6a)	(of which home grown)	213	165	279	290	255	256	1	-12%
(7)	Seed	6	3	10	10	10	10	-	-
(8)	Other	-	-	-	-	-	-	-	-
(9)	**Total domestic consumption**	**224**	**169**	**299**	**310**	**270**	**272**	**2**	-12%
(10)	**Balance (4) - (9)**	**13**	**5**	**14**	**35**	**11**	**10**	**-1**	-73%
(11)	Exportable surplus	7	-	4	29	1	0	-1	-99%
(12)	Intervention stocks	-	-	-	-	-	-	-	-
(13)	**Commercial end-season stocks**	**6**	**5**	**10**	**6**	**10**	**9**	**-1**	57%

		TOTAL CEREALS							
		2018/19 2022/23 average	2020/21 estimate	2021/22 estimate	2022/23 estimate	2023/24 May-24	2023/24 Sep-24	Absolute change May-24	% change on 22/23
(1)	Opening stocks	3,350	4,128	2,834	3,167	3,493	3,512	19	11%
(2)	Production	22,442	18,974	22,369	24,262	22,044	22,044	-	-9%
(3)	Imports	4,324	5,397	4,318	3,594	4,735	5,300	565	47%
(4)	**Total availability**	**30,116**	**28,499**	**29,521**	**31,023**	**30,272**	**30,856**	**584**	**-1%**
(5)	H&I (wheat, barley, maize, oats) (h)	10,231	9,881	10,402	10,602	10,832	10,836	4	2%
(6)	Animal feed (wheat, barley, maize oats) (h)	13,037	13,357	13,126	12,431	12,592	12,914	321	4%
(5a +6a)	Other cereals (H&I and animal feed)	219	166	289	300	260	262	2	-13%
(7)	Seed	487	494	492	483	483	483	-	-
(8)	Other	115	98	115	124	113	113	-	-9%
(9)	**Total domestic consumption**	**24,088**	**23,996**	**24,424**	**23,940**	**24,281**	**24,608**	**327**	**3%**
(10)	**Balance (4) - (9)**	**6,027**	**4,503**	**5,096**	**7,083**	**5,992**	**6,248**	**257**	**-12%**
(11)	Exports	2,191	1,679	1,537	3,041	1,236	1,321	85	-
(12)	Intervention stocks	-	-	-	-	-	-	-	-
(13)	**Commercial end-season stocks**	**3,416**	**2,834**	**3,167**	**3,512**	**4,756**	**4,539**	**-216**	**29%**
(14)	Estimated operating stock requirement (wheat & barley only)	2,310	2,280	2,300	2,300	2,300	2,300	-	-
(15)	Free stock for wheat and barley***	738	278	452	921	2,176	1,905	-271	107%
(16)	**Surplus available for either export or free stock (10)-(12)-(14)-(17)**	**3,717**	**2,233**	**2,404**	**4,253**	**3,692**	**3,560**	**-131**	**-16%**
(17)	**Residual (10)-(11)-(13)**		**-10**	**392**	**531**		**388**		

Source: AHDB, Defra

Links connect to relevant Defra/AHDB data pages
Due to rounding, totals may not agree with the sum of individual items
(i) Includes mainly rye, triticale and mixed grain.
* Change not meaningful
*** Free stock figure in total cereals for 2020/21 balance sheet relates to barley only, due to the wheat deficit
**** Other cereals production in 2023/24 has been calculated using official harvest 2023 area data and 2020/21 - 2022/23 average yields.

Appendix II

CUMULATIVE MONTHLY STATISTICS

Usage of cereals by processors, external trade and stocks

Situation as at end of June 2024

Thousand tonnes

		2018/19 to 2022/23 average	2018/19 52 weeks	2019/20 52 weeks	2020/21 52 weeks	2021/22 52 weeks	2022/23 52 weeks	2023/24 52 weeks	% Change 2023/24 on 2022/23	Actual Change 2023/24 on 2022/23
WHEAT										
Usage	**Flour millers [1]**	**5,982**	**6,085**	**6,050**	**5,649**	**6,004**	**6,123**	**6,271**	**2%**	**148**
	of which home-grown	4,918	5,034	5,287	4,163	4,904	5,204	5,092	**-2%**	**-113**
	of which imported	1,064	1,051	763	1,486	1,100	919	1,179	**28%**	**260**
	Brewers, maltsters and distillers	**856**	**730**	**670**	**818**	**1,001**	**1,060**	**1,083**	**2%**	**23**
	Animal Feed Processors [2]	**4,594**	**4,800**	**4,960**	**4,240**	**4,629**	**4,342**	**4,464**	**3%**	**122**
	of which feed compounders	3,461	3,644	3,777	3,159	3,486	3,238	3,239	**0%**	**1**
	of which intergrated poultry units	1,133	1,155	1,184	1,080	1,144	1,104	1,225	**11%**	**121**
Imports	**From July [3]**	**1,740**	**1,858**	**1,056**	**2,431**	**1,994**	**1,360**	**2,437**	**79%**	**1,076**
Exports	**From July [3]**	**774**	**358**	**1,205**	**209**	**511**	**1,586**	**258**	**-84%**	**-1,328**
BARLEY										
Usage	**Brewers, maltsters and distillers**	**1,841**	**1,889**	**1,766**	**1,710**	**1,872**	**1,970**	**1,904**	**-3%**	**-65**
	Animal Feed Processors [2]	**1,405**	**1,057**	**1,293**	**1,823**	**1,448**	**	**1,302**	**	**
	of which feed compounders	1,292	1,007	1,249	1,676	1,365	1,164	1,210	**4%**	**46**
	of which intergrated poultry units	81	50	44	147	83	**	92	**	**
Imports	**From July [3]**	**81**	**70**	**70**	**89**	**89**	**88**	**201**	**128%**	**113**
Exports	**From July [3]**	**1,166**	**863**	**1,790**	**1,290**	**764**	**1,123**	**780**	**-31%**	**-344**
MAIZE										
Usage	**Human and Industrial [4]**	**	**	**	**	**	**	**	*	*
	Animal Feed Processors [2]	**523**	**653**	**435**	**613**	**392**	**	**	*	*
	of which feed compounders	454	595	371	553	373	377	357	**-5%**	**-19**
	of which intergrated poultry units	50	58	64	60	20	**	**	*	*
Imports	**From July [3]**	**2,477**	**2,825**	**2,376**	**2,856**	**2,207**	**2,123**	**2,642**	**24%**	**519**
Exports	**From July [3]**	**145**	**188**	**135**	**138**	**134**	**131**	**167**	**27%**	**36**
OATS										
Usage	**Human and Industrial [5]**	**523**	**536**	**553**	**531**	**501**	**492**	**501**	**2%**	**9**
	Animal Feed Processors [2]	**82**	**66**	**64**	**82**	**125**	**73**	**45**	**-39%**	**-29**
Imports	**From July [3]**	**21**	**32**	**18**	**20**	**17**	**18**	**15**	**-12%**	**-2**
Exports	**From July [3]**	**99**	**37**	**120**	**41**	**123**	**172**	**116**	**-32%**	**-56**

Source: AHDB, Defra, HMRC

[1] Includes bioethanol and starch usage
[2] Great Britain only
[3] HMRC
[4] Data no longer available. For quarterly data to end of 2017/18, please access using historic balance sheets.
[5] Oat milled data published quarterly. Data displayed as at end-June (52 weeks).

* 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 2024. In order to incorporate the change January 2024 was increased to a 5 week period compared to 4 weeks in 2023.
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.
Figures in Appendix II were updated on 16 September 2024. The data above may differ from the most recent published data.

Disclaimer