

SUMMARY - SURVEY OF CEREAL AREAS AND VOLUMES – JULY 1, 2015

The objective of this AIMI survey of growers was to determine, as at July 1, 2015:

- the final size of the 2015 harvest of wheat, barley and oats
- sales channels and levels of on-farm storage, both sold and unsold, of the 2015 harvest
- autumn sowings of wheat, barley and oats, and sowing intentions for the spring of 2015

Data from 131 survey farms as at July 1, 2015 were scaled up to the national level using the most recent Agricultural Production Statistics. As with all surveys, there is a margin of error which needs to be considered in relation to this report. These figures reflect the position at the 1st July 2015 and there will have been changes since this time.

Key Points at 1 July 2015 (figures have been rounded to nearest 100):

Final average yields were virtually identical to last season, being just 3% lower for the two biggest crops, feed wheat and feed barley.

Milling wheat: Estimated final total tonnage (89,000 t) was down 10% compared to last year's harvest. Of this total 77% has been sold (69,000 t), although most of the sold grain is still stored on farm (75%). The amount of unsold grain is 20,000 tonnes (23%), which is less than at the same time last year, 1 July 2014 (23,600 t). The amount of unsold grain increased between 1 April and 1 July 2015 (up by 3,900 t), as compared to a 6,700 t decrease in unsold grain between the same dates last year.

Feed wheat: Estimated final total tonnage (308,800 t) was down 2% compared to last year's harvest. Of this total 88% has been sold (271,100 t), with 60% of the sold grain still stored on farm. The amount of unsold grain is 37,700 tonnes (12%), which is less than at the same time last year, 1 July 2014 (43,600 t). The amount of unsold grain decreased between 1 April and 1 July 2015 (down by 11,400 t), as compared to a 16,600 t decrease in unsold grain between the same dates last year.

Feed barley: Estimated final total tonnage (366,400 t) was up 7% compared to last year. Of this total tonnage 82% has been sold (301,900 t), with 52% of the sold grain still stored on farm. The amount of unsold grain is 64,500 tonnes (18%), which is more than at the same time last year, 1 July 2014 (43,700 t). The amount of unsold grain increased slightly between 1 April and 1 July 2015 (up by 2,500 t), as compared to a 16,100 t decrease in unsold grain between the same dates last year.

For other cereals: Compared to last year, estimated final total tonnage for malting barley (62,000 t) was unchanged, milling oats (24,200 t) was down by 15%, and feed oats made a huge 128% increase to 14,200 tonnes coupled with a similar jump in hectares. Malting barley had 11% of the total harvest unsold, while both milling oats and feed oats had only 1% unsold as at 1 July, 2015. Of the sold grain, 49% of malting barley was still on farm, as compared to 85% of milling oats but only 23% of feed oats. Between 1 April and 1 July 2015, the amount of unsold grain increased by 1% for malting barley, decreased by 59% for milling oats and decreased by 87% for feed oats (as compared to decreases of 87% for malting barley, 41% for milling oats and 14% for feed oats between the same dates last year).

Sowings and sowing intentions: The area sown in autumn/winter wheat or barley, as at 1 July 2015, was down 12% overall on autumn sowings plus intentions as at 1 April 2015. This decrease was mostly due to a 21% drop in autumn/winter sowings of feed barley. When autumn/winter sowings were combined with

spring sowing intentions, the area sown or to be sown in wheat or barley was down overall by 3% as compared to the area harvested in 2015. The estimated area of feed wheat to be harvested in 2016 is predicted to decrease by 2% from the 2015 harvest area, while the feed barley area is predicted to decrease by 8%. The area of milling wheat to be harvested in 2016 is predicted to increase by 18% from the 2015 harvest area.

Milling wheat (Tonnes)

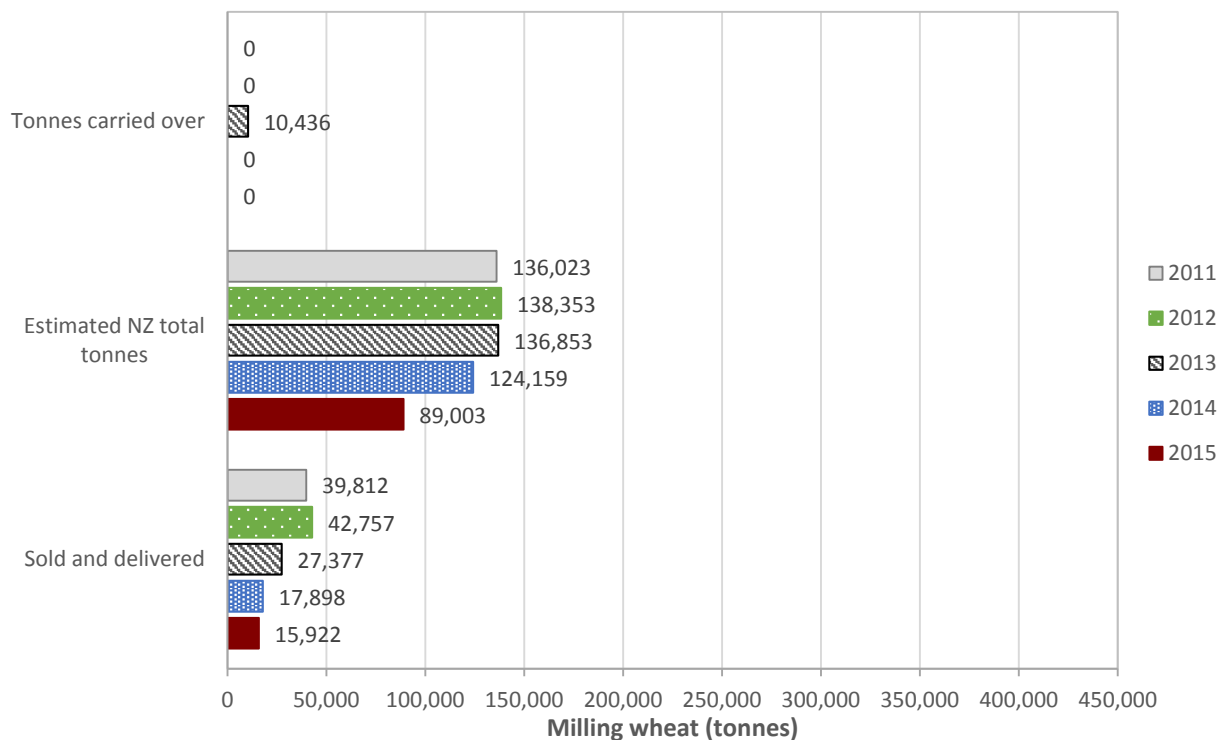


Figure 1a. Estimated NZ tonnage and sales channels for Milling wheat (tonnes) as at July 1 each year.

(Note: “Tonnes carried over” is the sum of sold and unsold stock carried over (still on farm) from the previous season. “Sold and delivered” relates to the current crop, excluding carryover stock.)

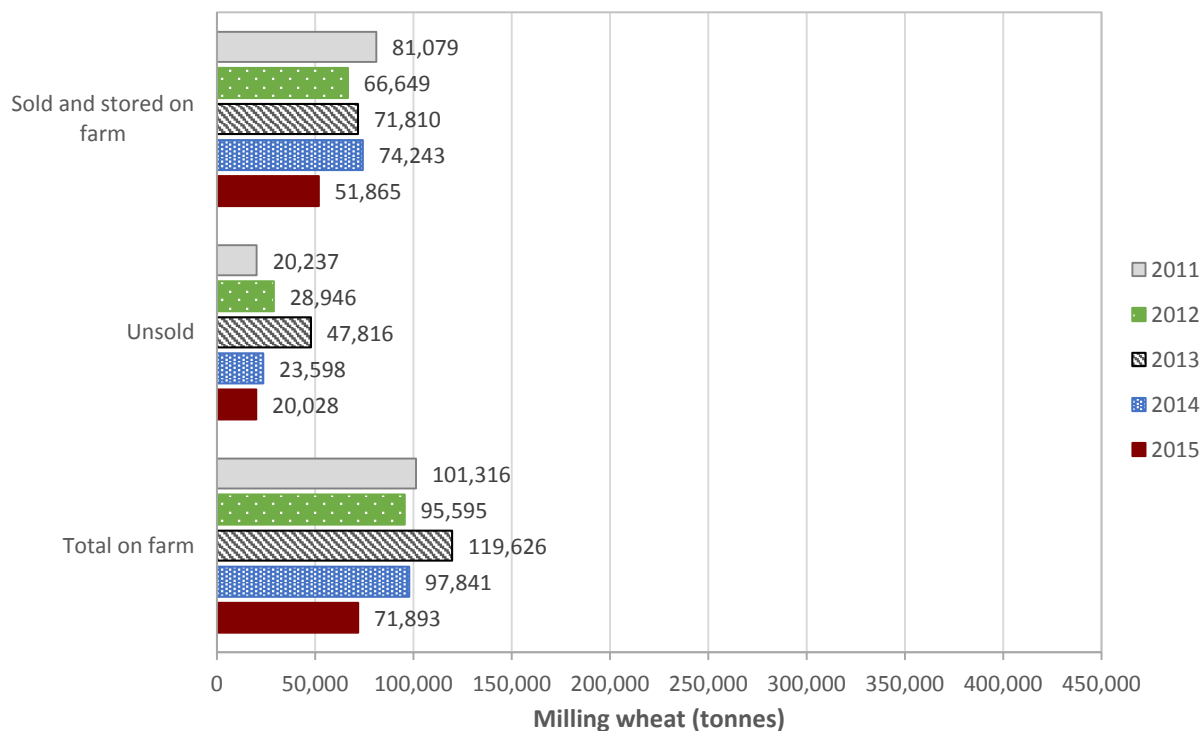


Figure 1b. Estimated NZ stocks on farm for Milling wheat (tonnes) as at July 1 each year.

(Note: Carryover stock from the previous season is included in all three bar graphs. Stock used on farm is excluded.)

NOTE: Historical data in both graphs is sourced from previous AIMI July reports.

Feed wheat (Tonnes)

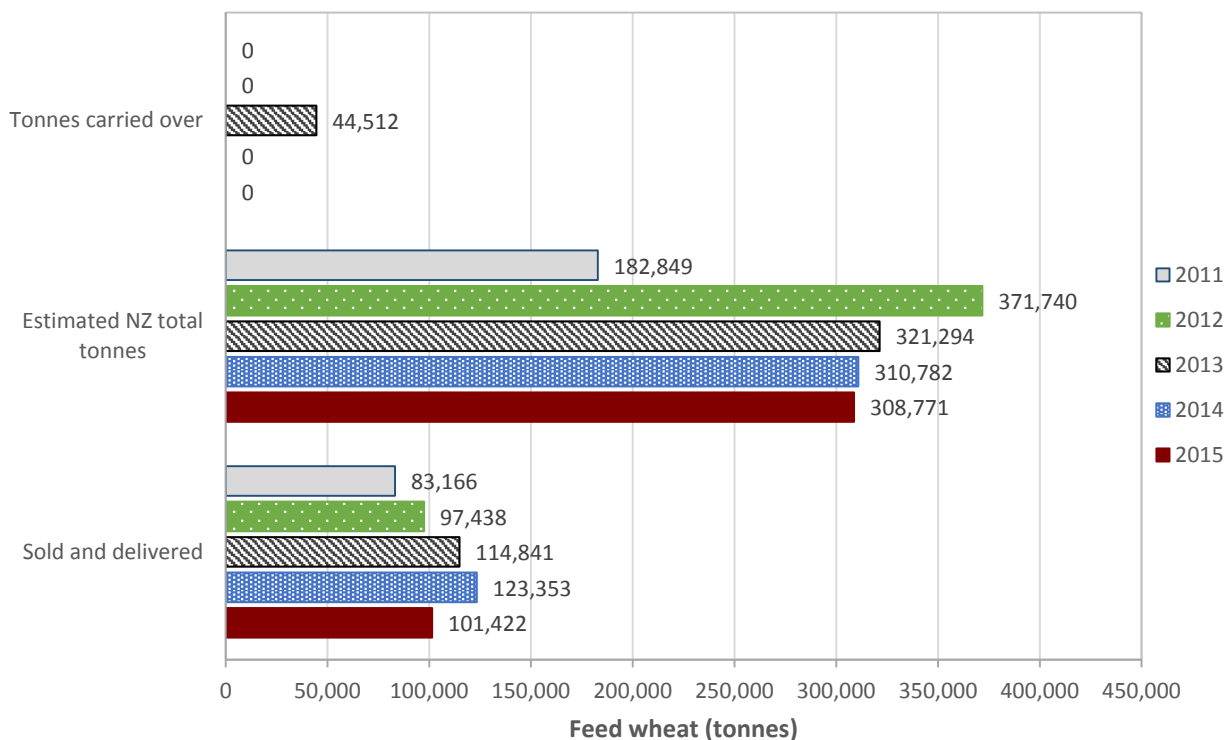


Figure 2a. Estimated NZ tonnage and sales channels for Feed wheat (tonnes) as at July 1 each year.

(Note: "Tonnes carried over" is the sum of sold and unsold stock carried over (still on farm) from the previous season. "Sold and delivered" relates to the current crop, excluding carryover stock.)

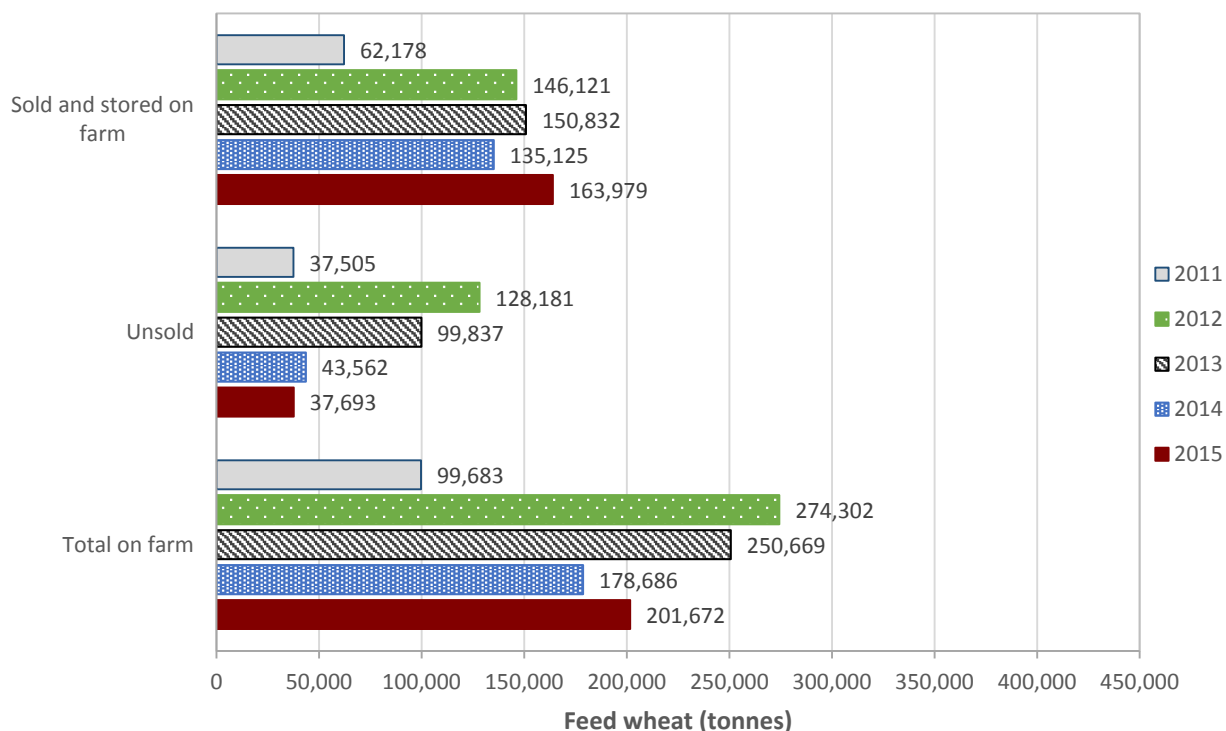


Figure 2b. Estimated NZ stocks on farm for Feed wheat (tonnes) as at July 1 each year.

(Note: Carryover stock from the previous season is included in all three bar graphs. Stock used on farm is excluded.)

NOTE: Historical data in both graphs is sourced from previous AIMI July reports.

Feed barley (Tonnes)

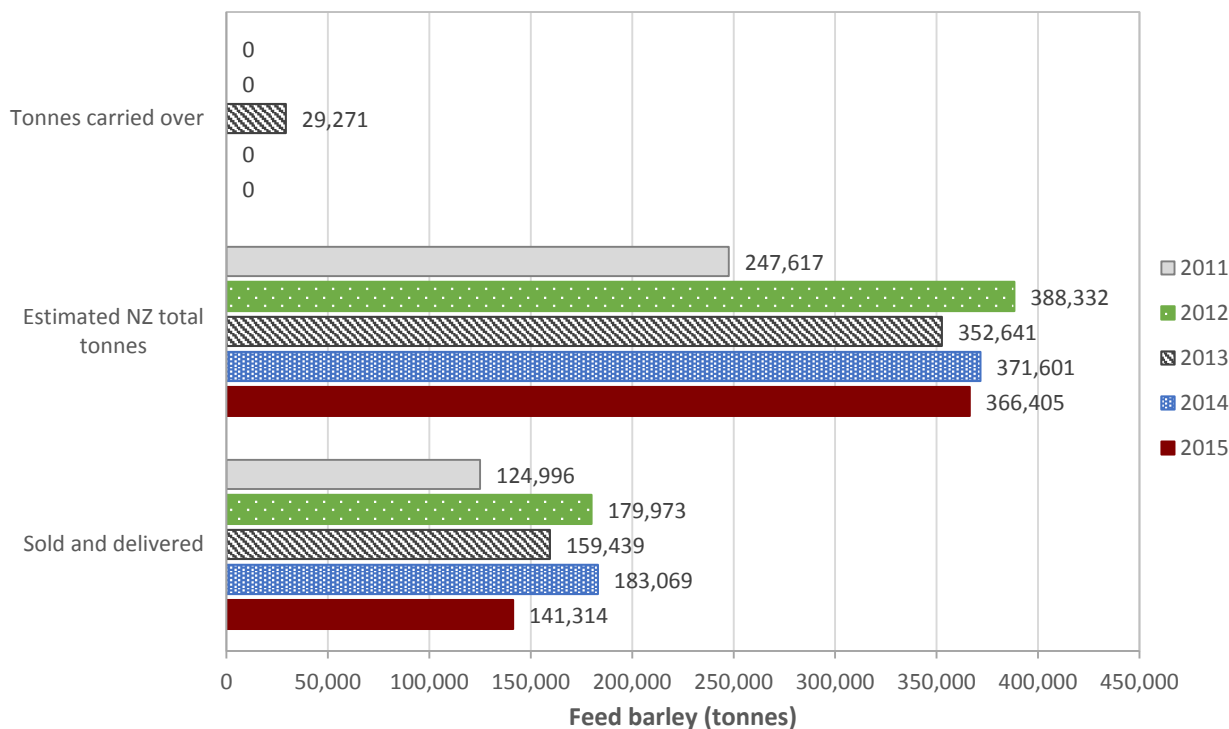


Figure 3a. Estimated NZ tonnage and sales channels for Feed barley (tonnes) as at July 1 each year.

(Note: “Tonnes carried over” is the sum of sold and unsold stock carried over (still on farm) from the previous season. “Sold and delivered” relates to the current crop, excluding carryover stock.)

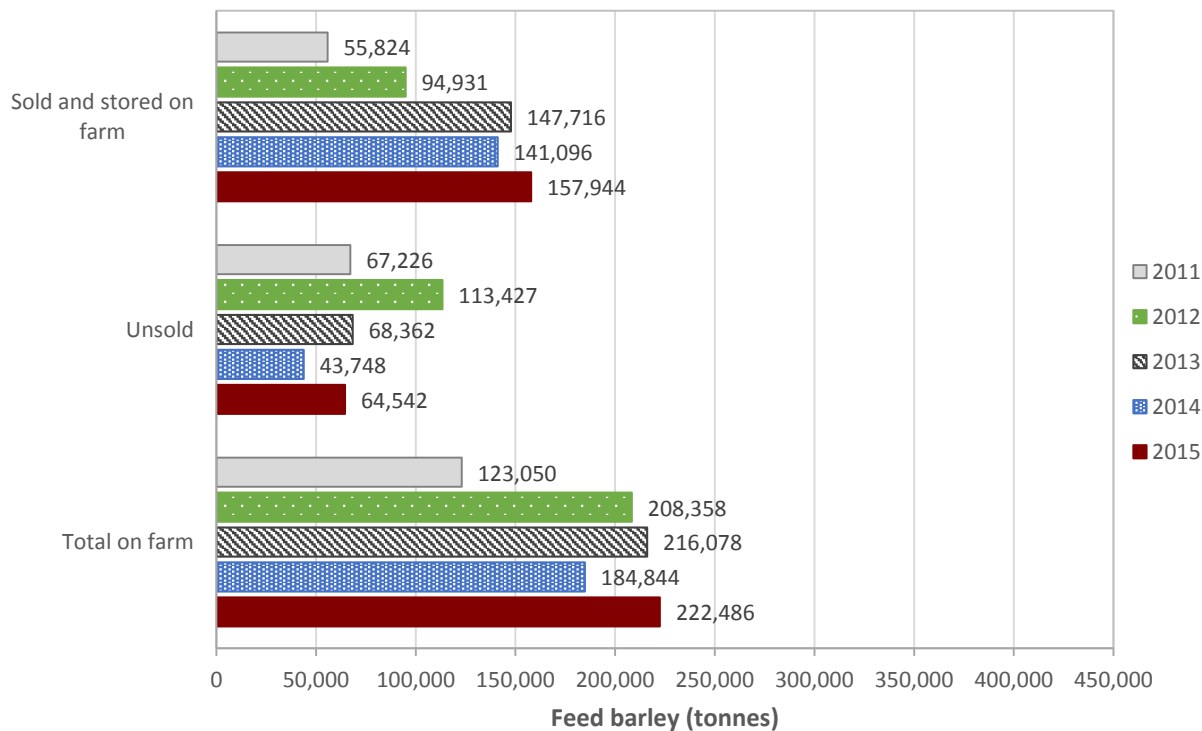


Figure 3b. Estimated NZ stocks on farm for Feed barley (tonnes) as at July 1 each year.

(Note: Carryover stock from the previous season is included in all three bar graphs. Stock used on farm is excluded.)

NOTE: Historical data in both graphs is sourced from previous AIMI July reports.

Autumn/winter sowings and sowing intentions as at July 1 each year.

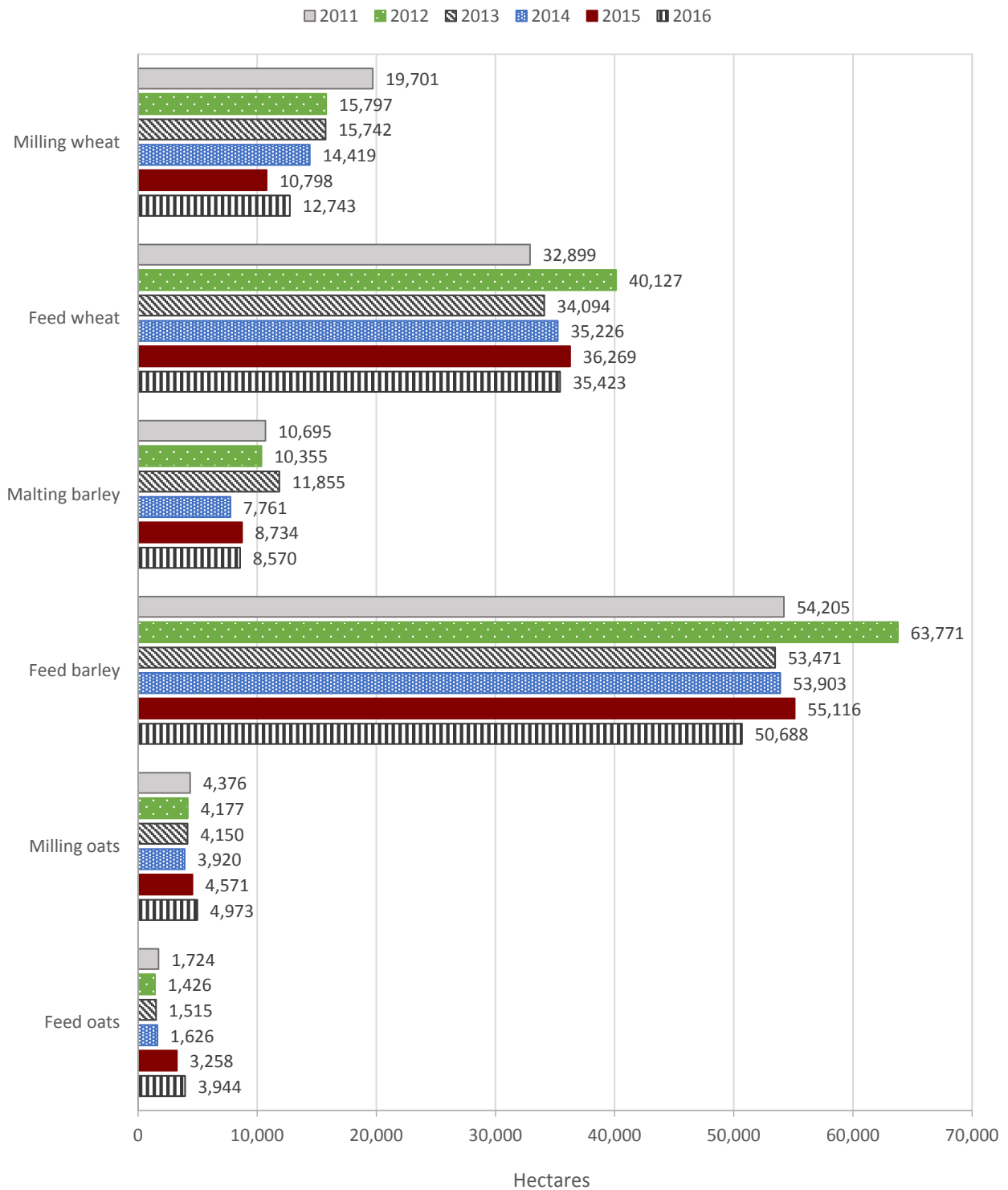


Figure 4. Estimated national harvest hectares for six cereal crops as at July 1, from 2011 to 2015 and predicted harvest hectares for 2016.

Note: 2011, 2012, 2013 and 2014 figures are from previous AIMI July reports, and 2015 and 2016 data are from the current report and involves the same group of growers.

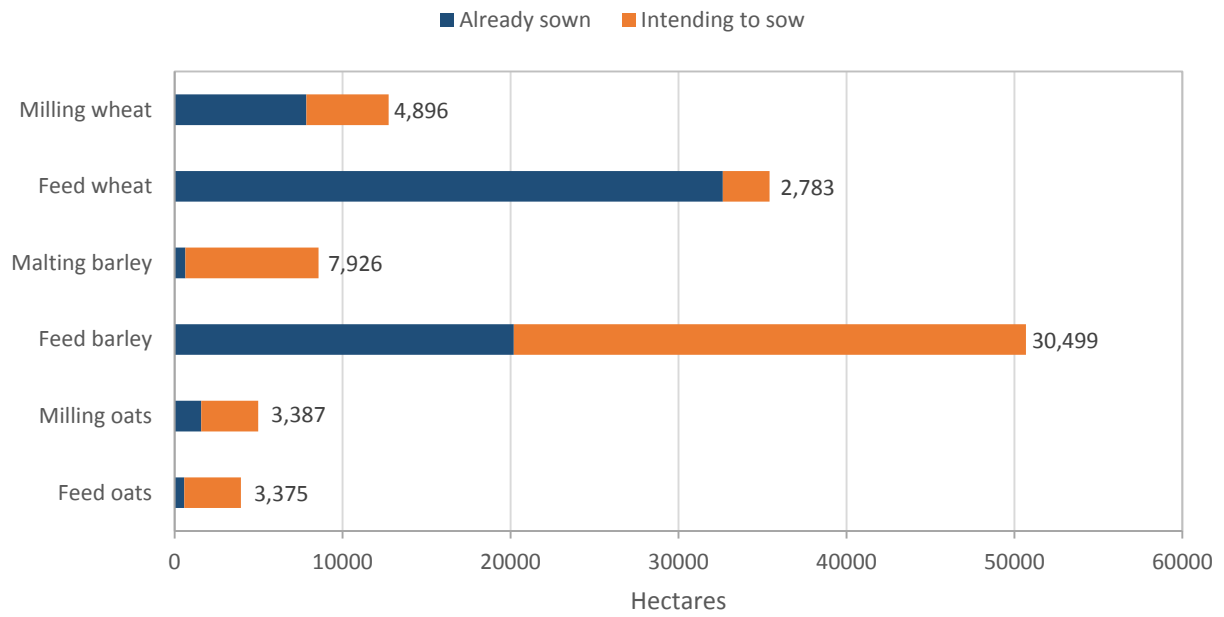


Figure 5. Estimated NZ autumn 2015 sowings and spring 2015 sowing intentions (hectares) for six cereal crops as at July 1, 2015.

Note: Numbers at the end of the bars represent sowing intentions. These are estimated totals derived from the survey, and have an associated margin of error.

Comparison of estimated NZ-wide yield (tonnes per ha) between harvests

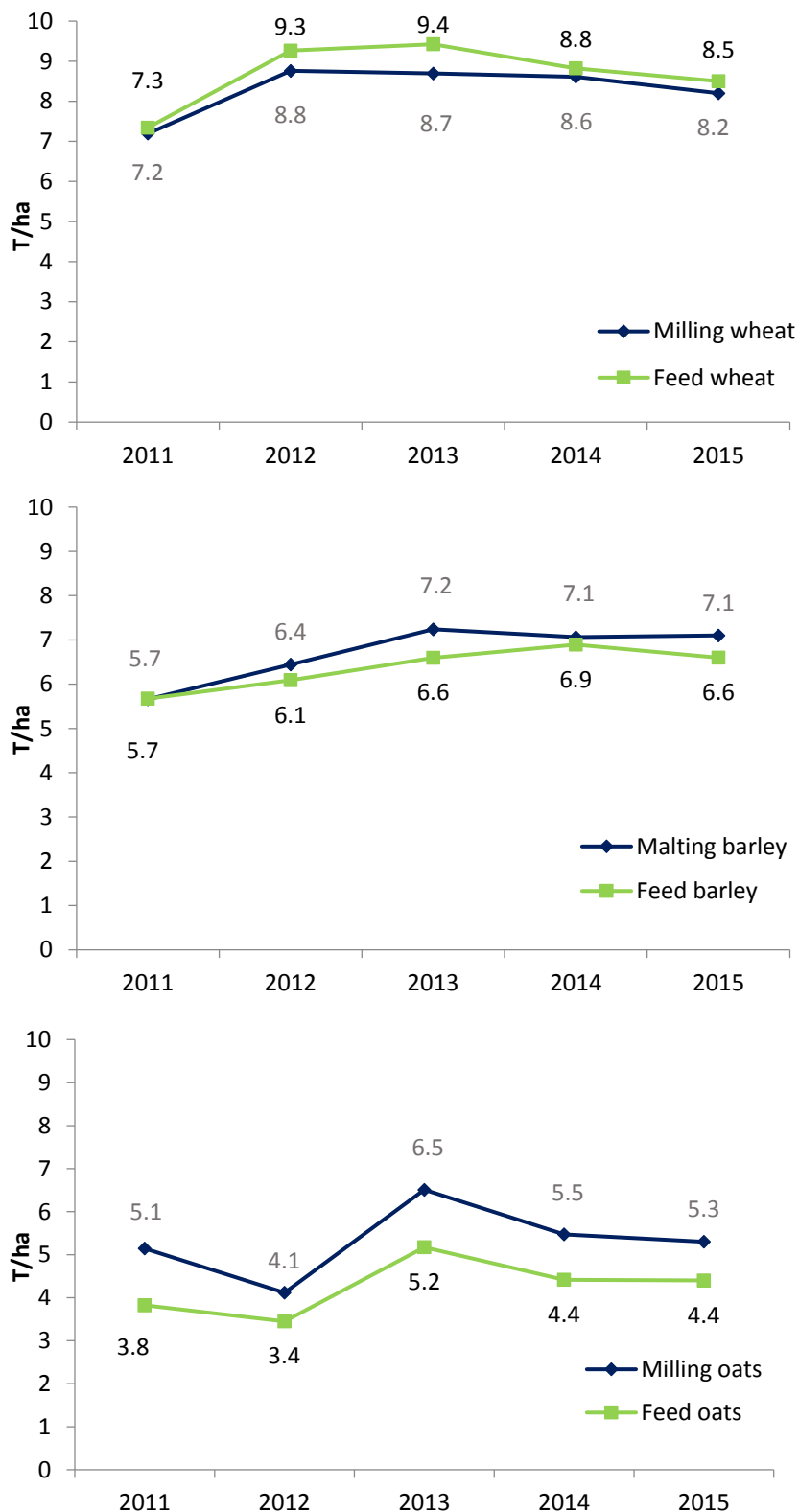


Figure 6. Comparison of NZ-wide yield (tonnes per ha) from 2011 to 2015 for six cereal crops.

Note: Data from AIMI reports for July 2012, 2013, 2014 and 2015.
 Milling wheat contains biscuit and gristing varieties.

Table 1. Detailed estimated national figures for the 2015 harvest, plus sold and delivered tonnages, for six cereal crops as at July 1, 2015.

	Units	Milling wheat	Feed wheat	Malting barley	Feed barley	Milling oats	Feed oats
Number of farmers in the survey who harvested this crop in 2015		41	84	26	109	11	20
2014 harvest							
Estimated NZ total hectares, 2014 harvest	Ha	12,204	35,696	8,919	50,381	5,213	1,447
Estimated NZ total tonnes, 2014 harvest	Tonnes	98,562	314,938	62,291	343,409	28,518	6,222
2015 harvest							
Estimated NZ total hectares, 2015 harvest (final figures)	Ha	10,798	36,269	8,734	55,116	4,571	3,258
Estimated NZ total tonnes, 2015 harvest (final figures)	Tonnes	89,003	308,771	62,014	366,405	24,219	14,193
Sold under pre-harvest contract and delivered by July 1 2015	Tonnes	15,922	86,668	25,455	108,326	2,653	9,203
Sold under pre-harvest contract and stored on farm on July 1 2015	Tonnes	50,347	145,080	27,218	138,354	19,791	3,114
Sold at spot/ free price and delivered by July 1 2015	Tonnes	0	14,754	1,509	32,988	505	148
Sold at spot/ free price and stored on farm on July 1 2015	Tonnes	1,518	18,899	0	19,590	417	95
(For milling or malting only) Downgraded and sold for feed by July 1 2015	Tonnes	1,188	-	852	-	505	-
(For feed only) Used on own farm (2015 harvest only) by July 1 2015	Tonnes	-	5,677	-	2,605	-	1,484
Unsold stocks on hand (2015 harvest only) on July 1 2015	Tonnes	20,028	37,693	6,979	64,542	347	148
Sales channels (2015 harvest)							
Sold under pre-harvest contract (total) by July 1 2015	Tonnes	66,269	231,748	52,673	246,680	22,444	12,317
Sold at spot/ free price (total) by July 1 2015	Tonnes	1,518	33,653	1,509	52,578	922	243
On farm storage (2015 harvest)							
Sold and delivered (total) by July 1 2015	Tonnes	15,922	101,422	26,965	141,314	3,158	9,351
Sold and stored on farm (total) on July 1 2015	Tonnes	51,865	163,979	27,218	157,944	20,208	3,209
Total sales (2015 harvest)							
Sold (grand total) by July 1 2015 (includes used on farm)	Tonnes	68,975	271,078	55,035	301,863	23,871	14,044
Unsold stocks on hand (2015 harvest only) on July 1 2015	Tonnes	20,028	37,693	6,979	64,542	347	148
Comparison of hectares and tonnages between last two harvests							
Estimated % change in hectares, 2014 to 2015 harvest	%	-11.5	1.6	-2.1	9.4	-12.3	125
Estimated % change in tonnes, 2014 to 2015 harvest	%	-9.7	-2.0	-0.4	6.7	-15.1	128
Comparison of yields (t/ha) between last two harvests							
NZ-wide estimated yield, 2014 harvest	T/ha	8.1	8.8	7.0	6.8	5.5	4.3
NZ-wide estimated yield, 2015 harvest	T/ha	8.2	8.5	7.1	6.6	5.3	4.4
Comparison of Unsold grain as at July 1, 2015, with Unsold grain as at April 1, 2015							
Unsold (2015 harvest only) as at April 1 2015 (includes unharvested grain) (new matched estimate, based upon scaling up data from exact same 131 survey farms as above)	Tonnes	16,120	49,093	6,914	62,026	853	1,102
Unsold (2015 harvest only) on July 1 2015 (<i>as above</i>)	Tonnes	20,028	37,693	6,979	64,542	347	148
Estimated drop in tonnes of Unsold grain, 1 April 2015 to 1 July 2015	Tonnes	-3,908	11,400	-65	-2,516	505	954
Estimated % drop in tonnes of Unsold grain, 1 April 2015 to 1 July 2015	%	-24%	23%	-1%	-4%	59%	87%
Note: A negative drop means that the tonnage of unsold grain from the 2015 harvest has <i>increased</i> since the last survey date (1 April, 2015).							
Comparison of Unsold grain as at July 1, 2015, with Unsold grain at the same date last year (July 1, 2014)							
Unsold (2014 harvest only) as at July 1 2014 (from July 1 2014 AIMI report)	Tonnes	23,598	43,562	797	43,748	1,393	700
Unsold (2015 harvest only) on July 1 2015 (<i>as above</i>)	Tonnes	20,028	37,693	6,979	64,542	347	148
Difference in tonnes of Unsold grain, 1 July 2014 to 1 July 2015	Tonnes	-3,570	-5,869	6,182	20,794	-1,046	-552

Table 2. Sowings and sowing intentions for six cereal crops as at July 1, 2015.

	Milling wheat	Feed wheat	Malting barley	Feed barley	Milling oats	Feed oats
	(ha)	(ha)	(ha)	(ha)	(ha)	(ha)
Number of farmers in the survey who have sown this crop in the autumn or winter or intend to sow in the spring, as at 1 July 2015	41	74	26	96	11	17
Estimated NZ total hectares, 2014 harvest	12,204	35,696	8,919	50,381	5,213	1,447
Estimated NZ total hectares, 2015 harvest	10,798	36,269	8,734	55,116	4,571	3,258
Estimated NZ total autumn/ winter 2015 sowings as at July 1, 2015 (hectares for harvest in 2016)	7,847	32,640	644	20,189	1,586	569
Estimated NZ total spring 2015 sowing intentions at at July 1, 2015 (hectares for harvest in 2016)	4,896	2,783	7,926	30,499	3,387	3,375
Predicted NZ total hectares, 2016 harvest (Autumn /winter sowings 2015 and Spring 2015 sowing intentions combined)	12,743	35,423	8,570	50,688	4,973	3,944
Comparison of hectares between 2014, 2015 and 2016 (predicted) harvests						
Estimated % change in NZ total harvest hectares, 2014 to 2015 harvest	-11.5	1.6	-2.1	9.4	-12.3	125
Estimated % change in NZ total harvest hectares, 2015 to 2016 harvest (predicted)	18.0	-2.3	-1.9	-8.0	8.8	21
Comparison of Autumn/ winter 2015 actual sowings (as at July 1, 2015) with sowings plus intended sowings as at April 1, 2015 (based upon <i>matched</i> data)						
Estimated NZ total autumn/ winter 2015 sowings and sowing intentions as at April 1, 2015 (date of previous survey) (hectares, for harvest in 2016)	7,450	35,151	1,529	25,623	883	1,529
Percentage change in autumn/ winter 2015 actual sowings (as at July 1, 2015) compared to sowings and sowing intentions as at April 1, 2015	5%	-7%	-58%	-21%	80%	-63%
Note: The matched comparison in the last two rows was based upon scaling up data from the <i>exact same</i> survey farms for both survey dates.						

This report is intended to provide accurate and adequate information relating to the subject matter contained in it. It has been prepared and made available to all persons and entities strictly on the basis that FAR, its researchers and authors are fully excluded from any liability for damages arising out of any reliance in part or in full upon any of the information for any purpose.

APPENDIX

Totals over 131 survey responses

In Table A.1, the yields per hectare on the survey farms were similar (within 0.3 t/ha) between the 2014 and 2015 harvests.

Table A.1 Data totalled over all survey respondents							
	Units	Milling wheat	Feed wheat	Malting barley	Feed barley	Milling oats	Feed oats
Number of farmers in the survey who harvested this crop in 2015		41	84	26	109	11	20
2014 harvest							
Total hectares on survey farms, 2014 harvest	Ha	1,794	5,246	983	5,552	641	178
Total tonnes on survey farms, 2014 harvest	Tonnes	14,931	47,710	7,676	42,317	4,515	985
2015 harvest							
Total hectares on survey farms, 2015 harvest (final figures)	Ha	1,587	5,330	963	6,074	562	401
Total tonnes on survey farms, 2015 harvest (final figures)	Tonnes	13,483	46,775	7,642	45,151	3,834	2,247
Sold under pre-harvest contract and delivered by July 1 2015	Tonnes	2,412	13,129	3,137	13,349	420	1,457
Sold under pre-harvest contract and stored on farm on July 1 2015	Tonnes	7,627	21,978	3,354	17,049	3,133	493
Sold at spot/ free price and delivered by July 1 2015	Tonnes	0	2,235	186	4,065	80	24
Sold at spot/ free price and stored on farm on July 1 2015	Tonnes	230	2,863	0	2,414	66	15
(For milling or malting only) Downgraded and sold for feed by July 1 2015	Tonnes	180	-	105	-	80	-
(For feed only) Used on own farm (2015 harvest only) by July 1 2015	Tonnes	-	860	-	321	-	235
Unsold stocks on hand (2015 harvest only) on July 1 2015	Tonnes	3,034	5,710	860	7,953	55	24
Comparison of yield (tonnes per ha) on survey farms between harvests							
Survey farms, 2014 harvest	T/ha	8.3	9.1	7.8	7.6	7.0	5.5
Survey farms, 2015 harvest	T/ha	8.5	8.8	7.9	7.4	6.8	5.6

In Table A.2, the data in Table A.1 are expressed as percentages.

Table A.2 Fate of 2015 crop, in percentages (by tonnes)							
	Units	Milling wheat	Feed wheat	Malting barley	Feed barley	Milling oats	Feed oats
Number of farmers in the survey who harvested this crop in 2015		41	84	26	109	11	20
2015 harvest							
% Sold under pre-harvest contract and delivered by July 1 2015	%	17.9	28.1	41.0	29.6	11.0	64.8
% Sold under pre-harvest contract and stored on farm on July 1 2015	%	56.6	47.0	43.9	37.8	81.7	21.9
% Sold at spot/ free price and delivered by July 1 2015	%	0.0	4.8	2.4	9.0	2.1	1.0
% Sold at spot/ free price and stored on farm on July 1 2015	%	1.7	6.1	0.0	5.3	1.7	0.7
(For milling or malting only) % Downgraded and sold for feed by July 1 2015	%	1.3	-	1.4	-	2.1	-
(For feed only) % Used on own farm by July 1 2015	%	-	1.8	-	0.7	-	10.5
% Unsold stocks on hand on July 1 2015	%	22.5	12.2	11.3	17.6	1.4	1.0
Sales channels (2015 harvest)							
% Sold under pre-harvest contract (total) by July 1 2015	%	74.5	75.1	84.9	67.3	92.7	86.8
% Sold at spot/ free price (total) by July 1 2015	%	1.7	10.9	2.4	14.3	3.8	1.7
On farm storage (2015 harvest)							
% Sold and delivered (total) by July 1 2015	%	17.9	32.8	43.5	38.6	13.0	65.9
% Sold and stored on farm (total) on July 1 2015	%	58.3	53.1	43.9	43.1	83.4	22.6
Total sales (2015 harvest)							
% Sold (of total crop) by July 1 2015 (includes used on farm)	%	77.5	87.8	88.7	82.4	98.6	99.0
% Unsold (of total crop) on July 1 2015	%	22.5	12.2	11.3	17.6	1.4	1.0

Table A.3 Autumn/ winter sowings and spring sowing intentions (data totalled over all survey respondents)						
	Milling wheat	Feed wheat	Malting barley	Feed barley	Milling oats	Feed oats
	(ha)	(ha)	(ha)	(ha)	(ha)	(ha)
Number of farmers in the survey who have sown this crop in the autumn or winter or intend to sow in the spring, as at 1 July 2015	41	74	26	96	11	17
Number of farmers in the survey who sowed in Autumn/ winter 2015	30	71	3	51	5	6
Number of farmers in the survey who intend to sow in Spring 2015, as at July 1 2015	24	19	26	78	10	13
Total hectares on survey farms, 2014 harvest	1,794	5,246	983	5,552	641	178
Total hectares on survey farms, 2015 harvest	1,587	5,330	963	6,074	562	401
Autumn/ winter 2015 sowings on survey farms as at July 1 2015 (hectares, for harvest in 2016)	1,153	4,797	71	2,225	195	70
Spring 2015 sowing intentions on survey farms as at July 1 2015 (hectares, for harvest in 2016)	720	409	874	3,361	417	415
Total predicted hectares for 2016 harvest, as at July 1 2015	1,873	5,206	945	5,586	612	485
Comparison of Autumn / Winter actual sowings (as at July 1, 2015) with intended sowings (as at April 1, 2015)						
Autumn/ winter 2015 sowings and intentions on these same survey farms as at April 1, 2015 (date of previous survey) (hectares, for harvest in 2016)	1095	5166	169	2824	109	188
Percentage change in autumn/ winter 2015 sowings (as at July 1, 2015) compared to sowings and intentions as at April 1, 2015	5%	-7%	-58%	-21%	80%	-63%

For scaling up to NZ-wide totals, the most recent APS figures are the Final 2014 figures, as in Table A.4. On average, the yields on the survey farms were higher than in the APS figures.

Table A.4 Scaling up from survey totals to NZ-wide totals using Final 2014 Agricultural Production Statistics (APS)				
	Units	Total wheat	Total barley	Total oats
Total hectares on survey farms, 2014 harvest	Ha	7,039	6,535	819
Total tonnes on survey farms, 2014 harvest	Tonnes	62,641	49,993	5,500
Final APS statistics for 2014 harvest, total hectares	Ha	47,900	59,300	6,660
Final APS statistics for 2014 harvest, total tonnes	Tonnes	413,500	405,700	34,740
Multiplier for scaling up from survey farms to APS statistics				
Hectares		6.805	9.074	8.132
Tonnes		6.601	8.115	6.316
Comparison of yields between survey and APS statistics				
Survey farms, 2014 harvest	T/ha	8.9	7.6	6.7
APS statistics, 2014 harvest	T/ha	8.6	6.8	5.2

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