

BARLEY MARKETING

By

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Barley marketing has increased in importance the last few years in North Dakota. During the period 1942-1947, the State produced 18 per cent of the Nation's barley. The amount of barley used for purposes other than feed and seed in North Dakota has fluctuated considerably since 1910. However, since 1940, there has been a substantial rise in the proportion of the total barley crop that is marketed for brewing and other industrial uses. For example the amount of barley sold off the farm increased from 30 per cent in 1940 to 68 per cent in 1946, much of this increase going into malt uses.

The question often arises: Will there be a good market for our increased supply of barley? Table 1 shows the United States supply and disappearance of barley for the 1943-44 crop year to the present. This table reveals that the disappearance of barley in the first half of the 1947-48 season was only about 147 million bushels. This was the smallest consumption for this period in the last nine years and averaged 30 per cent below that for the war years. What is behind this decline in consumption? Probably the major reason is that as barley prices advanced sharply in the fall of 1947, the feeding ratios became unfavorable and the consumption of barley for feed dropped off sharply.

The consumption of barley in the United States for industrial uses was large (51 million bushels) in the first half of the 1947-48 season despite a sharp drop in November and December in the production of malt beverages and a 60-day holiday in the distilling industry. Exports of barley during the first half of this season were large, amounting to 15 million bushels. Exports during the war years were negligible, but averaged over 8 million bushels in the 10 years, 1930-39.

In the six-year period, 1941-46 inclusive, an average of 88.7 million bushels were used annually for industrial purposes. The United States malting industry estimates that between 115-125 million bushels of barley, or 35 per cent above the 1941-46 consumption, will be consumed by the malting industry this year. This is larger than any previous year shown in Table 1.

Since a large part of the barley is used industrially, it is in the interest of farmers to do their best in seeing to it that the grain meets certain definite requirements. A large proportion of the barley used by industry is used in the malting trade. Malsters prefer barley that is plump, heavy, uniform in size, well matured, mellow in texture and of a straight run acceptable malting variety. Variety does not insure a high malting quality. Adequate rainfall, moderate ripening temperatures and the absence of diseases are all factors in producing plump and mellow kernels and a high yield. The germinating properties of barley are of material im-

Table 1. Barley: Supply and Distribution, United States, by Quarters, July 1943 to Date

Year and Quarters	Stocks at beginning of period				Pro-duction	Imports Grain Only	Total Supply	Disappearance				
	Farm	Com-mercial	Int. Mills and Ele.	Total				Indus-trial	Seed	Exports Grain Only	Feed and Residual	Total
	1000 bu.	1000 bu.	1000 bu.	1000 bu.	1000 bu.	1000 bu.	1000 bu.	1000 bu.	1000 bu.	1000 bu.	1000 bu.	1000 bu.
1943-44												
July-Sept.	81,000	9,028	30,494	120,522	322,913	17,012	460,447	24,499	1,858	118	105,479	131,954
Oct.-Dec.	246,000	20,588	61,905	328,493	.....	6,605	335,098	21,271	3,252	132	93,711	118,366
Jan.-Mar.	152,000	19,763	44,969	216,732	.....	3,909	220,641	21,209	5,574	1	59,646	86,430
Apr.-June	91,888	10,947	31,376	134,211	.....	13,089	147,300	23,793	12,542	153	34,875	71,363
SEASON	81,000	9,028	30,494	120,522	322,913	40,615	484,050	90,772	23,226	404	293,711	408,113
1944-45												
July-Sept.	48,500	6,923	20,514	75,937	276,112	9,215	361,264	27,312	1,519	25	69,891	98,747
Oct.-Dec.	180,385	26,032	56,100	262,517	.....	16,088	278,605	24,257	2,658	127	38,266	65,308
Jan.-Mar.	135,200	30,886	47,211	213,297	.....	2,546	215,843	23,114	4,556	279	46,331	74,280
Apr.-June	84,076	21,858	35,629	141,563	.....	9,966	151,529	24,972	10,250	344	20,892	56,458
SEASON	48,500	6,923	20,514	75,937	276,112	37,815	389,864	99,655	18,983	775	175,380	294,793
1945-46												
July-Sept.	54,100	14,479	26,492	95,071	266,833	3,746	365,650	25,739	1,494	709	85,921	113,863
Oct.-Dec.	169,297	22,922	59,568	251,787	.....	1,484	253,271	22,164	2,614	1,477	35,010	61,265
Jan.-Mar.	126,000	21,287	44,719	192,006	.....	356	192,360	21,870	4,482	413	54,296	81,061
Apr.-June	70,691	11,300	29,310	111,301	.....	61	111,362	18,871	10,084	368	23,469	52,792
SEASON	54,100	14,479	26,492	95,071	266,833	5,647	367,551	88,644	18,674	2,967	198,696	308,981
1946-47												
July-Sept.	38,700	4,464	15,406	58,570	262,258	218	321,046	21,924	1,559	362	61,189	85,034
Oct.-Dec.	160,258	18,248	57,506	236,012	.....	3,776	239,788	23,335	2,728	1,040 ²	36,994	64,097
Jan.-Mar.	110,000	20,985	44,706	175,691	.....	59	175,750	23,606	4,677	4,636 ²	31,410	64,329
Apr.-June	66,818	14,108	30,495	111,421	.....	10	111,431	26,140	10,525	6,528 ²	12,694	55,887
SEASON	38,700	4,464	15,406	58,570	262,258	4,063	324,891	95,005	19,489	12,566	142,287	269,347
1947-48												
July-Sept.	30,000	7,753	17,791	55,544	279,182	19	334,745	27,970	1,600	12,499 ²	45,935	88,004
Oct.-Dec.	160,403	27,444	58,894	246,741	.....	53	246,794	23,050	2,900	2,242 ²	30,959	59,151
Jan.-Mar.	117,300	26,581	43,762	187,643	.....						

¹Includes barley used for brewing and distilling, for other malt products and pearled barley.

²Includes shipments for military relief feeding which are not reported in commercial exports by U. S. Bureau of Census.

Source: United States Department of Agriculture, Production and Marketing Administration, Grain Branch.

portance to malsters. A strong and uniform germination during the malting process is desirable in order to produce high grade malt and to prevent wastage. Soundness and freedom from severe weather and disease damage are factors of importance in obtaining good germination.

The supply of a good grade of malting barley has not always been available to meet the demand, therefore, in the last year or two quite high premiums have been paid for malting barley. In the 1947 calendar year, an average premium of 58 cents was paid for good mellow malting barley.

In 1947, this premium represented an average of 44 per cent over the average feed barley price. In the eight months, August 1, 1947 to March 31, 1948, of the 1947-48 crop year the average price of feed barley was \$1.55 per bushel and an average premium of 63 cents was paid over this feed price for good mellow malting barley. In 1947, the preliminary per acre yield of barley was 21 bushels. On a per acre basis, feed barley would have made a gross return of \$32.55 and barley grading good mellow malting would have made a gross return of \$45.78. The difference amounts to \$13.23 per acre in favor of malting barley. On a 40 acre basis, good mellow malting barley would have netted the farmer \$529.00 more than barley of an average feed grade.

The amount of barley that meets the malting requirements is low and varies from year to year. Table 2 shows the proportion of cars graded malting barley by licensed inspectors in the United States for the period 1935-1944.

About one-third of the barley that is marketed from North Dakota passes through the Federal Inspection Station at Grand Forks. During the period August 1, 1946 to May 31, 1947, 19 per cent of the cars of barley that passed through this inspection station met the malting grade requirements. In 1944, 21 per cent of the barley that passed through this inspection station during the period

Table 2. Barley: Receipts graded by licensed inspectors, by class, United States, 1935-44.

Year Beginning July	Malting Barley (Per cent of cars)	Other Barley ¹ (Per cent of cars)
1935	28.0	72.0
1936	9.9	90.1
1937	16.4	83.6
1938	16.5	83.5
1939	49.3	50.7
1940	57.1	42.9
1941	35.9	64.1
1942	22.9	77.1
1943	13.1	86.9
1944	8.9	91.1

¹This sub-class shall include all barley which does not meet the requirements of malting barley.

Source: U.S.D.A. Agricultural Statistics, 1946. p. 64.

August 1 to December 31, 1944, met the malting grade. This is above the national average as shown in Table 2.

The malting barley area in North Dakota is located in the eastern part of the State, where the rainfall and temperatures are more adapted to the production of mellow malting barley. Conditions have been suitable in all parts of the State the last few years for producing good malting barley. In years of less rainfall the central and western portions of the State produce a barley that has a hard kernel which is not suitable for malt production.

The outlook at the present time indicates that there will be a large demand for good malting barley. If the supply runs about the same as it has the last few years, good malting barley will continue to attract a good premium over feed barley.

The feed barley prices advanced sharply in the fall of 1947, reflecting the world-wide shortage of grain and also the short domestic corn crop. Barley prices have advanced more rapidly than prices of hogs or cattle with the result that feeding ratios are less favorable than a year ago or the average. The United States feed supply will be short until the new crop comes in. The foreign demand will most likely hold up for at least another year. With this picture in view, the price for feed barley will probably be high—but down somewhat from this year's record level.

To get the largest possible proportion of the barley crop to meet the malting grade, close attention should be paid to the following factors since they will influence the malting quality:

1. Variety.
2. Climate and soil—Barley grows best on clay, clay-loam or fine silt loam soils having sufficient phosphorus and potash and not an excess of nitrogen.
3. Freedom from disease.
4. Freedom from mixtures—freedom from mixtures of other varieties of barley as well as from other grains and weeds.
5. Care during harvesting and threshing—Careless threshing destroys malting premiums. In the period August 1, 1946 to May 31, 1947, 50 per cent of the 5441 cars of barley that were inspected at Grand Forks did not meet the malting grade because of being more than 5 per cent skinned and broken. The greater part of this damage is done during the harvesting and threshing. (There will be an article in a future Bi-Monthly on the factors causing degrading of barley).