## Canadian Grain Standards

## and the Wheat Export Market

## Mel Maier and Don Anderson

The recent increases in wheat prices due to record commercial export sales dramatizes the increasing importance of the export market as an outlet for North Dakota's wheat production. Producers and those who serve them need to be aware of and responsive to changes in domestic and export consumers' grain requirements and attitudes.

If demand for North Dakota wheat is to continue, service to customers as well as price must be competitive and wheat quality must be maintained. As changes in the quality of the offered product occur, price relationships change. Services provided by the selling country, such as credit arrangements, shipping terms, and technical assistance to millers and bakers, also affect price relationships between particular classes of competitive wheats.

Canada has in recent years undertaken a complete review of its competitive position in world markets and has made a substantial effort to capture a larger share of the world demand for high-protein wheat.

A major undertaking has been the adoption of a new grain grading system designed to provide customers with a wider choice of quality and greater uniformity in deliveries with respect to protein content. The Canadian International Grains Institute has been established to expand the informational and technical assistance services available to overseas customers. The Institute will expand the program of information to customers, enable foreign technicians to learn about Canada's wheat in the Institute laboratory and familiarize domestic producers and grain trade with the mechanics of Canada's export movement.

Of all the exporting nations, only Canada has consistently offered a quality of wheat similar to that produced in North Dakota as Hard Red Spring and marketed overseas as United States Dark Northern Spring. Canada produces no other bread wheat, and because of a relatively small population depends on the export market as an outlet for two-thirds or more of its production. A combination of relatively low exports during 1967-69 and above-average production in 1968 and 1969 caused carry-over on July 1, 1970 to exceed one billion bushels, more than six times usual domestic consumption.

During this same period, United States exports of Dark Northern Spring increased from 70 million bushels in 1967-68 to 89 million in 1969-70 and 113 million in 1970-71. Exports during the current marketing year may reach a record 180 million bushels. The increases were due largely to an aggressive United States effort in past years to provide uniform export quality at a competitive price. This year, large Russian purchases of Hard Red Winter reduced availability of that class. Spring wheat producers, the grain trade, and the United States government have all sought to better understand the buyer's need and to be more concerned about the buyer's satisfaction with the quality of United States deliveries.

The Canada Grain Act established several new grades, but only No. 1 Canada Western Red Spring has been traded extensively since first being offered on August 1, 1972. No. 1 C.W.R.S., as it is now established, is a combination of Manitoba No. 1 and No. 2, the grades offered before the change. Little change, therefore, was expected in the physical measures of quality, such as test weight, degree of kernel soundness, vitreous kernel percentage, and percentage of impurities, from the older grades. To meet the grade, the wheat must continue to be equal in quality to Marquis. These minimum quality definitions for No. 1 C.W.R.S. and for the anticipated No. 2 and No. 3 C.W.R.S. can only be changed by statutory amendment.

In addition, each year the Canadian Grain Commission established an "export standard" of the No. 1 C.W.R.S. and of other grades to be offered. The "export standard" will normally have specifications which are higher than those of minimum requirements as set out in the Canada Grain Act.

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This is because the export standard is an average quality for the grade and depends in part on the quality of the crop for the year and on the quality of any carryover from previous years.

The export standard of No. 1 C.W.R.S. for the first (and current) year is as follows:

Test Weight Per Imperial Bushel — 63.4 pounds (61.4 pounds U. S.)

Total Foreign Material (including other cereal grains) --- 0.4 per cent, including 0.15 per cent other seeds.

Wheats of Other Classes, and Varieties Not Equal to Marquis — 1.5 per cent, including 0.2 per cent contrasting classes.

The most important change to overseas customers is offering No. 1 C.W.R.S. on a protein-guaranteed basis. A "certificate final" issued by the Canadian Grain Commission guarantees the buyer that the quality of the grade stated is equal to or better than the export standard. It also guarantees the minimum protein content and the amount of grain contained in the cargo. An extensive informational effort was made to introduce overseas customers to these changes.

To evaluate the effect of these changes, the NDSU Department of Agricultural Economics sent a questionnaire to leading milling firms and importers in Western Europe and Japan. Questions were raised regarding any overall change in the physical properties of Canadian wheat, milling and baking properties, and dependability of the protein guarantee.

From the responses to the questionnaire, concensus was that:

- 1. The guarantee of protein was the most important change in the new Canadian grain grading system for wheat. Buyers found that the actual protein level of the shipments was equal to that "guaranteed" and in many cases was better. Only rarely did protein fall below the specified level. This change is important because of advances in milling and baking technology, which have resulted in a demand for more exact knowledge of the protein level of wheat purchased.
- 2. Millers have noticed a small decline in the nonmillable portion of C.W.R.S. shipments. This difference in the physical characteristics of the wheat is no doubt due more to the characteristics of the crop year or the "export standard" specification for the year rather than the change in the grades.
- In general, however, millers and laboratories have noticed no significant differences in the milling and baking characteristics in the

- new grade. The wheat mills and bakes essentially similar to the old grades of the same protein content.
- All respondents emphasized that further experience with the new grades would be necessary.
- 5. Generally, United States No. 2 DNS was considered to be equal to C.W.R.S. of similar protein content in milling and baking properties. Several respondents indicated that the United States could improve its grading standards by reducing the amount of clean-out or nonmillable material. Millers reported that United States shipments have a lower moisture content, but that C.W.R.S. has a higher test weight.

In summary, the reaction of overseas wheat buyers to the changes in the Canadian grain grading and handling system is favorable. The most important aspect of the change is the delivery of protein on a guaranteed basis. It appears that the overall impact will be to make Canadian hard spring wheats more competitive with North Dakota's spring wheat in the export markets of the world. This move by the Canadian government makes it increasingly important for the United States to continue to strive for shipments of uniformly high quality spring wheat in export markets. As market needs and production practices change, we must continually adjust our market and grading system to meet the needs of the more and more demanding import buyers throughout the world.

This report is the result of the first phase of a study of the impact of the change in Canadian grain standards on the United States spring wheat market.

## FROM THE DIRECTOR

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measured by the quality standards established and in use. The principal reason for this production of less desirable quality wheats has been a demonstrated capacity to achieve greater yields from certain of these varieties during recent years than from those recommended for production on the basis of quality.

As yet, no single variety of hard red spring wheat named and released by any individual or organization represents an "ideal" wheat. This suggests there will always be room for improvement. Decisions for naming and release, therefore, in-

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