

Cornhusker Economics

Cooperative Extension

Institute of Agriculture & Natural Resources
Department of Agricultural Economics
University of Nebraska – Lincoln

The Potential for Hard White Winter Wheat in Nebraska

Market Report	Yr Ago	4 Wks Ago	1/12/01
<u>Livestock and Products,</u>			
<u>Average Prices for Week Ending</u>			
Slaughter Steers, Ch. 204, 1100-1300 lb			
Omaha, cwt	\$69.03	\$76.87	\$78.55
Feeder Steers, Med. Frame, 600-650 lb			
Dodge City, KS, cwt	92.63	93.77	94.83
Feeder Steers, Med. Frame 600-650 lb, Nebraska Auction Wght. Avg	97.88	99.30	96.50
Carcass Price, Ch. 1-3, 550-700 lb			
Cent. US, Equiv. Index Value, cwt	105.69	118.57	121.04
Hogs, US 1-2, 220-230 lb			
Sioux Falls, SD, cwt	36.75	40.50	37.00
Feeder Pigs, US 1-2, 40-45 lb			
Sioux Falls, SD, hd	44.50	33.50	*
Vacuum Packed Pork Loins, Wholesale, 13-19 lb, 1/4" Trim, Cent. US, cwt	99.20	115.80	110.20
Slaughter Lambs, Ch. & Pr., 115-125 lb			
Sioux Falls, SD, cwt	*	73.38	72.00
Carcass Lambs, Ch. & Pr., 1-4, 55-65 lb FOB Midwest, cwt	151.00	149.00	154.00
<u>Crops,</u>			
<u>Cash Truck Prices for Date Shown</u>			
Wheat, No. 1, H.W.			
Omaha, bu	2.93	3.22	3.44
Corn, No. 2, Yellow			
Omaha, bu	1.90	1.97	1.93
Soybeans, No. 1, Yellow			
Omaha, bu	4.55	4.85	4.55
Grain Sorghum, No. 2, Yellow			
Kansas City, cwt	3.28	3.72	3.65
Oats, No. 2, Heavy			
Sioux City, IA, bu	1.22	1.30	1.27
<u>Hay,</u>			
<u>First Day of Week Pile Prices</u>			
Alfalfa, Sm. Square, RFV 150 or better			
Platte Valley, ton	*	110.00	115.00
Alfalfa, Lg. Round, Good			
Northeast Nebraska, ton	33.75	75.00	67.50
Prairie, Sm. Square, Good			
Northeast Nebraska, ton	60.00	95.00	100.00
* No market.			

Hard white winter wheat, a crop developed using traditional crop breeding techniques, is a new crop with some potential payoff for Nebraska wheat producers. Phil Anthony, currently a Masters' degree student in the Dept. of Agricultural Economics, completed a study of the economic potential for this crop as part of a senior honors project while an undergraduate at UNL. The following is based largely on that study.

What is hard white winter wheat?

Hard white winter wheat is agronomically the same as the hard red winter wheat traditionally grown by Nebraska producers. It has been grown extensively in Australia, where winter wheat varieties were developed from different sources than the Turkey red that provided much of genetic base for early U.S. varieties. White varieties of hard wheat have less of the red, bitter-tasting, tannin in the seed coat. They offer slightly higher yields of flour that tastes sweeter than flour from red varieties. The Australian varieties that have dominated the Asian market have been especially valued for noodle-making, but these and other white varieties are also used for pita breads, tortillas, breads and cereals. (White wheat grown in the Pacific Northwest is classed as soft wheat, with quite different uses than the potential uses for hard white wheat).

Can hard white winter wheat be grown instead of hard red winter wheat in Nebraska?

Since hard white and hard red wheats are virtually the same from an agronomic point of view, whites can be substituted for reds in almost any Nebraska



production situation. However, white varieties have shown a tendency for seed head sprouting in more humid areas of the state, and they should not be planted on land recently used for red wheat, to avoid contamination from volunteer red seed. Until recently, yields of white varieties were lower, reflecting the fact that decades of breeding effort have been directed to the red varieties. In variety yield tests, the early white varieties such as Rioblanco, Oroblanco and Arlin yield only about 78-96% as much as widely-adopted red varieties, but recently-released white varieties such as the UNL-released NuPlains have actually outyielded comparable red varieties. Considerable effort is underway at both UNL and Kansas State to develop an expanded array of high-yielding white varieties. A special collaborative project between the Nebraska Wheat Board and the Nebraska Crop Improvement Association will help to insure that large quantities of NuPlains seed will be available for the 2001-2002 crop year. From all this information, we can conclude that Nebraska producers can grow white wheat if they choose, with virtually no relative agronomic disadvantages.

Is there a market for hard white winter wheat produced in Nebraska?

The Asian markets import about 400 million bushels of white wheat per year, contrasted with Nebraska's production of 60-85 million bushels of red. A recent study of Japanese imports concluded that adjusting for other wheat characteristics, the premium paid for whiteness alone was about 9%. This number suggests that there's a *potential* market in Asia, but at this point that market is being supplied by other countries and it is unlikely that the U.S. can get into this market until there are some very large quantities available to offer.

In the U. S. there are many proponents of the value of white wheat for domestic products. Whole-wheat style breads made from white wheat flour, white and sweet, are advocated for their higher content of health-promoting fiber. The milling yield of flour from white wheat is higher, because less of the seed coat (bran) needs to be removed. A small survey of millers for this study indicated that most of them believe they will ultimately be using white wheat, and half indicated they expect to pay somewhat of a premium for it.

But despite the potential Asian market, and the interest of segments of the U.S. market in the product, there is not an open spot market for white wheat

comparable to that for red wheat. There is a bit of a chicken and egg problem here, in that it will take a substantial amount of production (as much as five million bushels, according to ConAgra) to jump-start the market into operation. Nebraska growers who have produced white wheat have been contracting with one of several different millers and elevators, to produce specified amounts of white wheat at premiums up to 15¢ per bushel. The objective of the buyer-contractors, and the NuPlains seed multiplication effort, is to develop production to levels that a market may emerge.

Will hard white winter wheat pay off in Nebraska?

In the next year or two, most Nebraska producers will only produce white wheat if they find an elevator or miller willing to contract with them at a premium adequate to compensate them for the switch to the new product. Grain handlers themselves will also assume added burdens of segregating white wheat from the predominant red. However, most observers believe a separate market for white wheat will come into being in two or three years, given the potential advantage the white wheat has in both domestic and international markets. How much of a premium will be paid for the white relative to red wheat is a matter of speculation. In the short-run, premiums will be necessary to convince many producers to switch, and the evidence is pretty strong that there are both domestic and foreign buyers who are willing to pay a premium. In the longer run, this premium will probably disappear if production and handling costs for the two crops are about the same, as appears to be the case. For his study, Anthony estimated that the most likely scenario will be a 5% premium in the next year or two that dissipates to none in ten years. Under these circumstances, with ten percent of the wheat crop devoted to white varieties, the benefits to white wheat producers would total over \$2 million in present value. Perhaps more importantly, a white wheat production industry may also assure Nebraska a more secure role in the wheat markets of the future.

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