

2003-04 Long Range Planning Prices for Idaho Crops & Livestock

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2003-04 Long Range Planning Prices for Idaho Crops & Livestock

Prepared by University of Idaho Extension Agricultural Economists Paul E. Patterson, C. Wilson Gray and Neil R. Rimbey

Commodity prices can vary significantly within the marketing year as well as between years. Prices for many agricultural commodities tend to be lowest at harvest and strengthen throughout the year as the temporary imbalance between supply and demand changes. Some commodities follow well-established seasonal price patterns, while others are less predictable, more volatile and vary significantly from year-to-year as well as throughout the marketing year. Even for a commodity with a well-established seasonal pattern, the overall price level can vary dramatically even though the pattern may remain unchanged. While it is difficult for one price to represent an entire marketing year--and may even be misleading--a single price is often needed for planning purposes.

Because one price will not fit all planning purposes, we provide both long range and short range planning prices. The long range planning prices, contained in this publication, are based on historical (time-series) data. The problem with using historical data in planning for the future is that the data gives a much clearer view of the past than the future. Unless there has been a significant structural change, historical prices provide a reasonable estimate to use for planning purposes. Short run planning prices for the current market year based on projected prices are found in a separate publication.

The long range planning prices are developed once each year and distributed in early fall. For crops, there is a separate table for each region of the state: Northern, Southwestern, Southcentral and Eastern. These are found, respectively, in tables 2-5. There is only one table for livestock, Table 6. There are three columns with each crop price table. The middle column shows the 10-year simple average price for the marketing year. Prior to 2002, the long range planning price was calculated using the 10-year Olympic average. The left column shows the lowest marketing year average for the past ten years and the right column shows the highest marketing year average price over the past ten years. These are **not** the lowest and highest prices received,

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however. Crop prices correspond to a commodity specific marketing year used by USDA, generally from harvest to harvest, while livestock prices are on a calendar year basis.

The short run or projected crop prices are based upon current market fundamentals: supply, demand, stocks and expected utilization. The short run planning prices are also released in the fall and revised as needed during the year when market fundamentals change unexpectedly. In addition to the expected seasonal average price for the current marketing year, the expected high and low prices are also provided. Short run livestock planning prices are forecast on a quarterly bases.

Short Vs. Long Run

Whether to use the long run or the short run price will depend on the type of analysis. A feasibility study comparing the profitability of alternative crop or livestock enterprises should use the long range planning prices, while a cash flow estimate for the current year would rely on the short-run planning price.

What price should be used on crops that will be harvested in 2004 and sold in the 2004/2005 marketing year? One alternative is to average the long and short run planning prices and use this value. Since prices tend to move toward the historical average, the price for the 2004 crop will likely be between the short run (current price) and long run price, assuming the short run price is accurate and that no structural changes have occurred in the market that would disrupt the normal price pattern. A more conservative approach to planning is to use the long run planning price for all years but the current one. This second method is preferred particularly when the short range planning price varies significantly from the long range planning price.

Data Sources and Data Problems

USDA agencies are the primary sources of information used to derive Idaho planning prices, but a number of non-USDA sources are also used. Primary USDA data sources include the Idaho Agricultural Statistics Service (IASS), the National Agricultural Statistics Service (NASS) and the Agricultural Market Service (AMS). Unfortunately, USDA does not acquire price data on all crops grown in the state and price data is not always market class specific. For example, the wheat price published December 2003 by the IASS is differentiated only as winter and spring. But a significant difference exists between the price of hard red spring wheat and soft white spring wheat, and between hard red winter and soft white winter wheat. Obtaining price information for crops grown predominately or exclusively under contract can be particularly difficult since the data is often proprietary.

Wheat prices in this publication are based on Portland prices reported by the Agricultural Marketing Service, USDA and adjusted to Idaho locations using transportation and handling costs. While the price difference between Portland and various locations in Idaho has changed over time, it tends to remain fairly stable within a given year. The grain market location for Southwestern Idaho is the Notus/Weiser area, the market location for Southcentral Idaho is the Burley/Filer/Wendell area, the market location for Eastern Idaho is American Falls and the market location for Northern Idaho is Lewiston. Wheat prices at both Moscow and Nez Perce would be approximately \$.25 per bushel below the Lewiston price. While the difference between the Portland and the Idaho marketing year average wheat price is the same for different market classes, there is some variation on the high and low end of prices as shown in the typical price differentials in Table 1. These differentials are used to calculate the region-specific wheat prices from Portland price data.

The price for contract malting barley is calculated using the average of the three most recent contracts base prices. Historically, two of the three major malting companies operating in Idaho provided a fixed base-price contract for barley meeting specified grade and quality standards. Quality-based incentives are added to the base price for barley exceeding the minimums. Contracts in recent years have increased in complexity and often give the grower several different pricing alternatives, ranging from a fixed price, with or without storage compensation, to a prevailing company posted price or the average of these posted prices over a specified period of time. There is typically a minimum price specified with this pricing alternative. One company prices malt barley on a specified premium over a three-month average feed barley price. The premiums often vary by contracting company and also by barley variety.

The long range average open malt barley price is calculated \$1.10 above feed barley in each region. While the malt barley premium varies year-to-year, the \$1.10 per cwt represents an average historical price difference. The price spread between feed and December 2003 malting barley is not as great on either the low or high price years. The difference is estimated at \$.70 and \$.30, respectively, on the low and high price spread. Up until 1991, IASS reported only one barley price in Idaho. This was a composite of the monthly average of feed barley, open malt barley and contract malt barley purchases. While USDA still maintains the all barley price, it also has a feed barley price series and a malt barley price series. The malt barley price series doesn't presently contain an adequate historical base needed to look at long term trends. Also, the IASS malt barley price is not an open-market price since it includes both open market and contract purchases made during a given month.

The average grain corn prices, sugarbeet prices and sweet corn prices are based on the state average annual price reported by the Idaho Agricultural Statistics Service.

Prices for dry beans, dry peas and lentils use data from USDA-AMS. A market year average price is calculated using monthly price data. The, minimum and maximum average prices are calculated using the market year averages for the most recent ten years. The Garbanzo price is an exception since the Idaho Garbanzo price series has only been around for the past five years. The same procedure followed for dry beans is used for fresh and processing open market potato prices. IASS monthly price data for fresh and process market potatoes is used to calculate a market year average price. The contract potato price, however, uses the three most recent base contract prices adjusted for the five-year quality average.

Lacking an acceptable price series from USDA, hay, straw and corn silage prices come from a variety of different sources, including hay brokers, livestock producers county agents and extension specialists. The procedure used to derive a long range average is fairly subjective. It can best be described as an "experts opinion."

The cost of forage, or grazing fees, are presented on an AUM (Animal Unit Month) basis. An AUM is defined as "a cow or a cow-calf pair, or equivalent grazing for one month." Separate rates are shown for range and pasture land managed by Federal agencies (BLM and Forest Service), the Idaho State Land Board and private landowners. The federal and state grazing fees are formula-based, while the private fee is market-based survey data. The federal AUM price is the rate charged by the Forest Service and BLM and is derived using the PRIA (Public Range Improvement

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Act) formula. The AUM price on state lands in Idaho is set annually by the Land Board and is based upon a PRIA-like formula established in 1994. The price per AUM for private grazing land is based on USDA-NASS data for Idaho cow-calf charges reported in the December issue of "Agricultural Prices." The long range forage charges are based on the most recent ten years of data.

Livestock Price Estimates

The long range planning prices found in Table 5 are based on 10-year averages. Several years of recent livestock prices are also provided. While livestock prices are statewide estimates, they are most reflective of Southern Idaho.

For Additional Information

The commodity planning prices are presented as a guideline to assist farmers, ranchers, lenders and agri-businesses in planning. Local prices will vary from these regional prices.

Your planning efforts will be enhanced if you monitor the current market outlook situation. Use new information to modify your plans as necessary. Some sources of current outlook for those with access to the Internet, include:

 Reports published by the Economic Research Service, the World Agriculture Outlook Board, and the National Agricultural Statistics Service, all part of USDA, are available at the following URL:

http://usda.mannlib.cornell.edu/usda/usda.html

- Reports from Agricultural Market Service, USDA, are available at the following URL: <u>http://www.ams.usda.gov/marketnews.htm</u>
- The University of Florida has an excellent site with current USDA-AMS reports as well as a historical archive;

http://mis.ifas.ufl.edu/~market/market.html

 An electronic version of the *Livestock Monitor* and other industry related information is available from the Livestock marketing Information Center web site:

http://www.lmic.info/

 Jim Hilker's Market Outlook and Probabilistic Forecasts for Grain and Livestock, Michigan State University:

http://www.msu.edu/user/hilker/

• Kim Anderson's Crop Marketing and Risk Management, Oklahoma State University:

http://agecon.okstate.edu/anderson/

• Other information of interest and many agricultural links can be found at:

http://www.ag.uidaho.edu/aers

Click on resources and follow the links.

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Region	Minimum	Average	Maximum			
	Soft White Wheat					
Southeast	\$.80	\$.75	\$.75			
Southcentral	\$.95	\$.90	\$.90			
Southwest	\$.80	\$.75	\$.75			
North	\$.30	\$.25	\$.25			
	Ŀ	lard Red Winter Whe	at			
Southeast	\$1.00	\$.75	\$.70			
Southcentral	\$1.15.	\$.90	\$.85			
Southwest	\$1.00	\$.75	\$.70			
	Ŀ	lard Red Spring Whe	at			
Southeast	\$.85	\$.75	\$.85			
Southcentral	\$1.00	\$.90	\$1.00			
Southwest	\$.85	\$.75	\$.85			

Table 1. Wheat price differentials between Portland and Idaho: by region and wheat market class.

		10-yr Seasonal Price					
Сгор	Units	Minimum	Average	Maximum			
Barley, Feed	cwt	\$ 3.50	\$ 4.80	\$ 6.65			
Barley, Malt (open)	cwt	\$ 3.80	\$ 5.90	\$ 6.75			
Barley, Malt (contract)*	cwt		\$ 6.75				
Dry Beans							
Garbanzos *	cwt	\$16.00	\$20.00	\$24.25			
Dry Peas:			Star Starly				
Austrian Winter	cwt	\$ 7.40	\$10.55	\$12.90			
Green	cwt	\$ 5.80	\$ 8.05	\$11.30			
Yellow	cwt	\$ 5.90	\$ 7.85	\$10.60			
Lentils	cwt	\$ 9.40	\$13.05	\$17.20			
Wheat:				1.			
Hard Red Spring (14%)	bu						
Hard Red Winter (11%)	bu						
Soft White	bu	\$ 2.70	\$ 3.55	\$ 5.10			
Forage				-			
Alfalfa Hay:				1			
Feeder*	ton	Na	\$75	na			
Dairy*	ton	Na	Na	na			
Grass Hay*	ton		\$60				
Straw*	ton		\$30				
Private Forage	AUM	\$11.10	\$12.55	\$13.70			
Range (state)	AUM	\$ 4.15	\$ 4.80	\$ 5.35			
Range (Federal)	AUM	\$ 1.35	\$ 1.40	\$ 1.60			

Table 2. Northern Idaho long range marketing year planning prices for 2003/04.

Prices are for crops sold on the open market, unless otherwise specified; i.e. contract.

Contract crop prices typically represent contract prices over the past 3-5 years, not a 10-year average. * Does not use 10-year price history. See written discussion.

			10-yr Seasonal Pri	ce
Сгор	Units	Minimum	Average	Maximum
Alfalfa Seed :			18.29 H	1 1 1 1 1 1
Proprietary*	lb	Na	\$ 1.25	Na
Public*	lb	Na	\$ 1.15	Na
Barley, Feed	cwt	\$ 3.70	\$ 4.90	\$ 6.75
Corn, Grain	bu	\$ 2.35	\$ 3.00	\$ 4.50
Sweet Corn (contract)	ton	\$56	\$ 71	\$82
Dry Beans (composite)	cwt	\$15.10	\$19.80	\$23.75
Great Northerns	cwt	\$16.10	\$20.40	\$28.25
Pinks	cwt	\$14.15	\$19.85	\$25.40
Pintos	cwt	\$15.60	\$20.05	\$27.25
Small Reds	cwt	\$14.45	\$21.00	\$28.60
Small Whites	cwt	\$17.00	\$21.45	\$28.00
Potatoes:			And the state	
Process Contract*	cwt	\$ 4.40	\$ 4.65	\$ 5.00
Fresh – open	cwt	\$ 2.50	\$ 4.70	\$ 8.35
Process - open	cwt	\$ 4.35	\$ 4.90	\$ 5.85
Sugarbeets (contract)	ton	\$38	\$41	\$46
Wheat:				11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Hard Red Spring (14%)	bu	\$ 3.15	\$ 4.05	\$ 5.45
Hard Red Winter (11%)	bu	\$ 2.15	\$ 3.35	\$ 5.05
Soft White	bu	\$ 2.20	\$ 3.05	\$ 4.60
Forage				1 A
Alfalfa Hay:				
Feeder*	ton	na	\$75	na
Dairy*	ton	na	\$90	na
Grass Hay*	ton	na	\$60	na
Corn Silage*	ton	na	\$24	na
Straw*	ton	na	\$35	na
Private Leased Forage	AUM	\$11.10	\$12.55	\$13.70
Range (state land)	AUM	\$ 4.15	\$ 4.80	\$ 5.35
Range (Federal land)	AUM	\$ 1.35	\$ 1.40	\$ 1.60

Table 3. Southwestern Idaho long range marketing year planning prices for 2003/04.

Prices are for crops sold on the open market, unless otherwise specified; i.e. contract.

Contract crop prices typically represent contract prices over the past 3-5 years, not a 10-year average. * Does not use 10-year price history. See written discussion.

	10-yr Seasonal Price					
Сгор	Units	Minimum	Average	Maximum		
Alfalfa Seed: Proprietary*	lb	na	\$	na		
Alfalfa Seed: Public*	lb	na	\$	na		
Barley, Feed	cwt	\$ 3.60	\$ 4.85	\$ 6.70		
Barley, Malt (open)	cwt	\$ 4.00	\$ 5.75	\$ 6.80		
Barley, Malt (contract)*	cwt		\$ 6.75			
Corn, Grain	bu	\$ 2.35	\$ 3.00	\$ 4.50		
Sweet Corn (contract)	ton	\$ 56	\$ 71	\$82		
Dry Beans (composite)	cwt	\$15.10	\$19.80	\$23.75		
Great Northerns	cwt	\$16.10	\$20.40	\$28.25		
Pinks	cwt	\$14.15	\$19.85	\$25.40		
Pintos	cwt	\$15.60	\$20.05	\$27.25		
Small Reds	cwt	\$14.45	\$21.00	\$28.60		
Small Whites	cwt	\$17.00	\$21.45	\$28.00		
Potatoes:						
Process Contract *	cwt	\$ 4.40	\$ 4.65	\$ 5.00		
Fresh – open	cwt	\$ 2.50	\$ 4.70	\$ 8.35		
Process – open	cwt	\$ 4.35	\$ 4.90	\$ 5.85		
Sugarbeets (contract)	ton	\$38	\$41	\$46		
Wheat:						
Hard Red Spring (14%)	bu	\$ 3.00	\$ 3.90	\$ 5.30		
Hard Red Winter (11%)	bu	\$ 2.00	\$ 3.20	\$ 4.90		
Soft White	bu	\$ 2.05	\$ 2.90	\$ 4.40		
Forage						
Alfalfa Hay:						
Feeder*	ton	na	\$75	na		
Dairy*	ton	na	\$90	na		
Grass Hay*	ton	na	\$60	na		
Corn Silage*	ton	na	\$24	na		
Straw*	ton	na	\$35	na		
Private Leased Forage	AUM	\$11.10	\$12.55	\$13.70		
Range (state land)	AUM	\$ 4.15	\$ 4.80	\$ 5.35		
Range (Federal land)	AUM	\$ 1.35	\$ 1.40	\$ 1.60		

Table 4. Southcentral Idaho long range marketing year planning prices for 2003/04.

Prices are for crops sold on the open market, unless otherwise specified; i.e. contract.

Contract crop prices typically represent contract prices over the past 3-5 years, not a 10-year average. * Does not use 10-year price history. See written discussion.

			10-yr Seasonal Price	ce
Crop	Units	Minimum	Average	Maximum
Barley, Feed	cwt	\$ 3.50	\$ 4.60	\$ 6.55
Barley, Malt (open)	cwt	\$ 4.00	\$ 5.70	\$ 6.75
Barley, Malt (contract)*	cwt		\$ 6.75	
Potatoes:				
Proc. Contract	cwt	\$ 4.40	\$ 4.65	\$ 5.00
Fresh – open	cwt	\$ 2.50	\$ 4.70	\$ 8.35
Process open	cwt	\$ 4.35	\$ 4.90	\$ 5.85
Seed - G2 *	cwt	\$ 6.00	\$ 8.00	\$ 10.50
Seed - G3 *	cwt	\$ 4.00	\$ 6.25	\$ 8.00
Sugarbeets (contract)	ton	\$39	\$42	\$48
Wheat:				
Hard Red Spring (14%)	bu	\$ 3.15	\$ 4.05	\$ 5.45
Hard Red Winter (11%)	bu	\$ 2.15	\$ 3.35	\$ 5.05
Soft White	bu	\$ 2.20	\$ 3.05	\$ 4.60
Forage				
Alfalfa Hay:				
Feeder*	ton	na	\$75	na
Dairy*	ton	na	\$85	na
Grass Hay*	ton	na	\$60	na
Corn Silage*	ton	na	\$23	na
Straw*	ton	na	\$30	na
Private Leased Forage	AUM	\$11.10	\$12.55	\$13.70
Range (state land)	AUM	\$ 4.15	\$4.80	\$ 5.35
Range (Federal land)	AUM	\$ 1.35	\$ 1.40	\$ 1.60

Table 5. Eastern Idaho long range marketing year planning prices for 2003/04.

Prices are for crops sold on the open market, unless otherwise specified; i.e. contract.

Contract crop prices typically represent contract prices over the past 3-5 years, not a 10-year average. * Does not use 10-year price history. See written discussion.

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	Calendar Year Average					
	Unit	2000	2001	2002	2003-р	Long Term Ave.
Choice Steers 11 - 1300# *	cwt	68.94	72.39	67.51	83.65	71.10
Steers 8-900# *	cwt	79.06	78.80	72.92	80	72.03
Steers 7-800# *	cwt	83.67	84.30	74.95	83	74.45
Steers 6-700# *	cwt	90.06	91.70	80.55	88	78.78
Steers 5-600# *	cwt	96.35	97.29	85.87	94	83.76
Steers 4-500# *	cwt	104.21	104.81	92.18	103	89.79
Utility Cows **	cwt	41.83	44.72	37.85	45	40.74
Slaughter Lambs (125#)*	cwt	158.61	129.66	142.81	181	152
Feeder Lambs (70-90#)*	cwt	95.24	89.38	79.80	102	77
Sheep	Head	32.40	32.00	29.20	34.50	29
Wool (Clean, USDA 56's) Wool (Grease, US Farm Price)	lb. Ib.	0.57 0.33	0.66 0.36	1.19 0.53	1.48 1.00	1.10 0.63
Milk, Class III	cwt	9.74	13.10	10.42	11.41	11.95
Milk, Class IV	Cwt	11.83	13.76	10.81	9.99	12.15

Table 6. Historic and long range planning prices for PNW livestock.

p = preliminary; * heifers will be 4 to 10 cents under steers in the same wt. class;
** bulls will be 4 to 6 cents over utility cows.

Slaughter lambs are dressed-weight basis, feeder lambs are live weight basis. Historic data from USDA-IASS and USDA-AMS.