



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

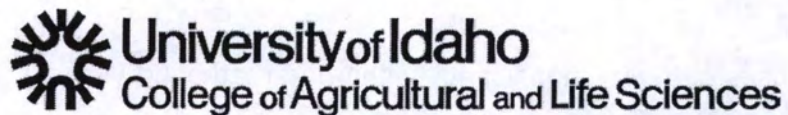
This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*



2005-06 Long Range Planning Prices for Idaho Crops & Livestock

by

Paul E. Patterson, C. Wilson Gray and Neil R. Rimbey
Agricultural Economics and Rural Sociology Department

All from the University of Idaho Cooperative Extension System

A. E. Extension Series No. 05-05

December 2005

Departmental Working Paper Series

**Department of Agricultural Economics
and Rural Sociology**

College of Agricultural and Life Sciences
University of Idaho
Moscow, Idaho 83844-2334

2005-06 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. Other commodity prices are less predictable, more volatile and vary significantly from one year to the next as well as throughout the marketing year. Even for a commodity with a well-established seasonal price pattern, the overall price level can vary even though the pattern may remain unchanged. While it is difficult for a single price to characterize an entire marketing year--and may even be misleading--a single price is often needed for planning purposes.

Businesses must plan for both the short term and the long term. Because a single price will not always work for short and long range planning purposes, we provide two different planning price series. The long range planning prices contained in this publication are based on historical (time-series) data. Short run planning prices for the current market year are found in a separate publication.

A potential 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 that would impact the commodity, then historical prices will provide a simple but effective estimate for future price behavior. These can be used for some but not all planning purposes. The long range planning prices are developed 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 based on the marketing year for that crop. Prior to 2002, the long range planning price was calculated using the 10-year Olympic average where the high and low prices were removed before the average was calculated. Contract

crops (processing potatoes, sugarbeets and malt barley), silage, hay and straw do not use a 10-year average.

The left (minimum) and right (maximum) columns found in Tables 2-5 contain the lowest and highest monthly or annual prices over the past ten years. The minimum and maximum are monthly values for feed barley, open malt barley, dry beans, dry peas, fresh potatoes, process potatoes, and all wheat classes. For contract crops (malt barley, processing potatoes and sugarbeets), grain corn, and forage crops, including grazing fees, the minimum and maximum are the highest and lowest annual values. Monthly price series are generally not available, and for some, monthly and annual values are the same. Keep in mind that these are **not** the lowest and highest prices received for these commodities. 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 (found in a separate publication) 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 if 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 basis.

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 2006 and sold in the 2006/2007 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 2006 crop will likely be between the short run (current price) and long run price, assuming that the short run price is accurate and that no structural

changes have occurred in the market that would disrupt the normal supply and demand situation and invalidate the long run prices based on historical data. 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

While USDA agencies are the primary sources of information used to derive Idaho planning prices, 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 prices are published on a statewide, not a regional basis. Also, price data is not always specific for a market class. For example, the wheat price published by the IASS is differentiated only as winter and spring. But a difference exists between the price of hard red spring wheat and soft white spring wheat market classes, and between hard red winter and soft white winter wheat market classes. Price transparency and availability is a problem for crops grown predominately or exclusively under contract. Data is often proprietary.

Wheat prices found in this publication are based on Portland prices reported by the Agricultural Marketing Service, USDA and adjusted to Idaho locations using typical 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/Pocatello and the market location for Northern Idaho is Lewiston. Wheat prices in Idaho Falls would be 5-10 cents lower than American Falls. At both Moscow and Nez Perce, prices 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 between 2-row and 6-row, by contracting company and even by variety.

The long range average open malt barley price is calculated by adding \$1.10 to the feed barley price 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 malting barley is not as great on either the low or high price years. The difference is estimated at \$.50 and \$.00, 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. There are two problems with using this price series. First, to avoid disclosure, IASS may not always report a monthly price. And second, the IASS malt barley price is not an open- or spot-market price. It includes both open market and contract purchases made during a given month. The 10-year average for the IASS malting barley price series is \$6.25, a slightly higher value than the values calculated by adding a fixed price premium to feed barley.

The average grain corn prices and sugarbeet 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 both IASS and USDA-AMS. A market year average price is calculated for each dry bean market class using AMS monthly price data. This data is also used to determine the minimum and maximum monthly average prices 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 seven years. The composite dry bean price is based on IASS monthly price data. IASS monthly price data for fresh and process market potatoes are used to calculate a market year average price for these two open market prices. The contract potato price, however, uses the three most recent base contract prices for Russet Burbank potatoes, adjusted for the five-year quality average. The contract price is for an in-weight (field-run) contract that does not include storage.

Lacking an acceptable price series from USDA, hay, straw and corn silage prices come from a variety of different sources, including hay brokers, producers, extension educators and extension specialists. The procedure used to derive a long range average for these commodities is fairly subjective. It can best be described as an "expert's 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 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 reported in the "Agricultural Prices." The long range forage charges are based on the most recent ten years of historical data.

Livestock Price Estimates

The long range planning prices found in Table 6 are based on 10-year averages. Livestock prices for the past four years are also provided as a reference. 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 Agricultural Marketing Service, Economic Research Service, World Agriculture Outlook Board, and National Agricultural Statistics Service, all part of USDA, are available at the following URL:
<http://usda.mannlib.cornell.edu/usda/usda.html>
- Market News reports from Agricultural Market Service, USDA, are available at the following URL:
<http://www.ams.usda.gov/marketnews.htm>
- 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.

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

Region	Minimum	Average	Maximum
<u>Soft White Wheat</u>			
Southeast	\$.85	\$.75	\$.95
Southcentral	\$.90	\$.85	\$1.00
Southwest	\$.75	\$.70	\$.80
North	\$.30	\$.25	\$.25
<u>Hard Red Winter Wheat</u>			
Southeast	\$.85	\$.85	\$.70
Southcentral	\$.90	\$.90	\$.75
<u>Hard Red Spring Wheat</u>			
Southeast	\$.80	\$.90	\$1.10
Southcentral	\$.90	\$.95	\$1.10
Southwest	\$.85	\$.85	\$.95

Note: These values are subtracted from the Portland 10-year average price, 10-year maximum monthly price and 10-year minimum monthly price to derive the Idaho regional wheat prices.

Table 2. Northern Idaho long range marketing year planning prices for 2004/05.

Crop	Units	Marketing Year 10-yr Price		
		Monthly/Annual Minimum	Average	Monthly/Annual Maximum
Barley, Feed	cwt	\$ 2.75	\$ 4.75	\$ 7.95
Barley, Malt (open)	cwt	\$ 3.90	\$ 5.75	\$ 7.40
Barley, Malt (contract)*	cwt	---	\$ 6.50	---
Oats	ton	\$55	\$81	\$105
Canola	cwt	\$7.30	\$10.30	\$13.70
Dry Beans				
Garbanzos *	cwt	\$15.00	\$21.40	\$29.90
Dry Peas:				
Austrian Winter	cwt	\$ 6.00	\$10.35	\$14.00
Green	cwt	\$ 5.15	\$ 7.75	\$12.65
Yellow	cwt	\$ 5.10	\$ 7.40	\$12.65
Lentils	cwt	\$ 9.05	\$13.60	\$20.75
Wheat:				
Hard Red Spring (14%)	bu	---	---	---
Hard Red Winter (11%)	bu	---	---	---
Soft White	bu	\$ 2.35	\$ 3.55	\$ 5.75
Forage				
Alfalfa Hay:				
Feeder*	ton	Na	\$75	na
Dairy*	ton	Na	Na	na
Grass Hay*	ton	---	\$60	---
Straw*	ton	---	\$20-35	---
Private Forage	AUM	\$10.10	\$11.10	\$12.20
Range (state)	AUM	\$ 4.16	\$ 4.90	\$ 5.53
Range (Federal)	AUM	\$ 1.35	\$ 1.41	\$ 1.79

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.

Table 3. Southwestern Idaho long range marketing year planning prices for 2004/05.

Marketing Year 10-yr Price				
Crop	Units	Monthly/Annual Minimum	Average	Monthly/Annual Maximum
Alfalfa Seed :				
Proprietary*	lb	na	\$ 1.25	na
Public*	lb	na	\$ 1.10	na
Barley, Feed	cwt	\$ 3.50	\$ 4.85	\$ 7.50
Corn, Grain	bu	\$ 2.40	\$ 2.85	\$ 3.85
Dry Beans (composite)	cwt	\$13.60	\$19.30	\$27.40
Great Northerns	cwt	\$15.25	\$19.10	\$30.00
Pinks	cwt	\$13.00	\$20.20	\$26.00
Pintos	cwt	\$14.50	\$20.25	\$30.00
Small Reds	cwt	\$13.00	\$20.70	\$30.50
Small Whites	cwt	\$16.50	\$21.20	\$29.15
Potatoes (Russet Burbank):				
Process Contract*	cwt	\$ 4.25	\$ 4.75	\$ 5.25
Fresh – open	cwt	\$ 1.30	\$ 4.60	\$ 12.40
Process - open	cwt	\$ 3.30	\$ 4.75	\$ 6.70
Onions	Cwt		\$4.75	
Sugarbeets (contract)	ton	\$35	\$39	\$43
Wheat:				
Hard Red Spring (14%)	bu	\$ 2.75	\$ 3.85	\$ 6.65
Soft White	bu	\$ 1.90	\$ 3.10	\$ 5.20
Forage				
Alfalfa Hay:				
Feeder*	ton	na	\$75	na
Dairy*	ton	na	\$90	na
Grass Hay*	ton	na	\$70	na
Corn Silage* (in the pit)	ton	\$18	\$24-26	\$27
Straw*	ton	na	\$35-40	na
Private Leased Forage	AUM	\$10.10	\$11.10	\$12.20
Range (state land)	AUM	\$ 4.16	\$ 4.90	\$ 5.53
Range (Federal land)	AUM	\$ 1.35	\$ 1.41	\$ 1.79

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.

* Field Delivery. Does not use 10-year price history. See written discussion.

Table 4. Southcentral Idaho long range marketing year planning prices for 2004/05.

Crop	Units	Marketing Year 10-yr Price		
		Monthly/Annual Minimum	Average	Monthly/Annual Maximum
Alfalfa Seed: Proprietary*	lb	na	\$ 1.25	na
Alfalfa Seed: Public*	lb	na	\$ 1.10	na
Barley, Feed	cwt	\$ 3.45	\$ 4.80	\$ 7.50
Barley, Malt (open)	cwt	\$ 3.50	\$ 5.75	\$ 7.50
Barley, Malt (contract)*	cwt	---	\$ 6.50	---
Corn, Grain	bu	\$ 2.40	\$ 2.85	\$ 3.85
Dry Beans (composite)	cwt	\$13.60	\$19.30	\$27.40
Great Northerns	cwt	\$15.25	\$19.10	\$30.00
Pinks	cwt	\$13.00	\$20.20	\$26.00
Pintos	cwt	\$14.50	\$20.25	\$30.00
Small Reds	cwt	\$13.00	\$20.70	\$30.50
Small Whites	cwt	\$16.50	\$21.20	\$29.15
Potatoes (Russet Burbank):				
Process Contract *	cwt	\$ 4.25	\$ 4.75	\$ 5.25
Fresh – open	cwt	\$ 1.30	\$ 4.60	\$12.40
Process – open	cwt	\$ 3.30	\$ 4.75	\$ 6.70
Sugarbeets (contract)	ton	\$35	\$39	\$43
Wheat:				
Hard Red Spring (14%)	bu	\$ 2.70	\$ 3.75	\$ 6.50
Hard Red Winter (11%)	bu	\$ 2.00	\$ 3.25	\$ 6.05
Soft White	bu	\$ 1.75	\$ 2.95	\$ 5.00
Forage				
Alfalfa Hay:				
Feeder*	ton	na	\$75	na
Dairy*	ton	na	\$90	na
Grass Hay*	ton	na	\$65	na
Corn Silage* (in the pit)	ton	\$18	\$24-26	\$27
Straw*	ton	\$20	\$30-45	\$50
Private Leased Forage	AUM	\$10.10	\$11.10	\$12.20
Range (state land)	AUM	\$ 4.16	\$ 4.90	\$ 5.53
Range (Federal land)	AUM	\$ 1.35	\$ 1.41	\$ 1.79

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.

* Field delivery. Does not use 10-year price history. See written discussion.

Table 5. Eastern Idaho long range marketing year planning prices for 2004/05.

Crop	Units	Marketing Year 10-yr Price		
		Monthly/Annual Minimum	Average	Monthly/Annual Maximum
Barley, Feed	cwt	\$ 3.20	\$ 4.55	\$ 7.50
Barley, Malt (open)	cwt	\$ 3.50	\$ 5.75	\$ 7.50
Barley, Malt (contract)*	cwt	---	\$ 6.50	---
Potatoes (Russet Burbank):				
Proc. Contract	cwt	\$ 4.25	\$ 4.75	\$ 5.25
Fresh – open	cwt	\$ 1.30	\$ 4.60	\$12.40
Process. – open	cwt	\$ 3.30	\$ 4.75	\$ 6.70
Seed - G2 *	cwt	\$ 4.00	\$ 7.50	\$ 10.00
Seed - G3 *	cwt	\$ 3.00	\$ 6.25	\$ 8.00
Sugarbeets (contract)	ton	\$36	\$40	\$44
Wheat:				
Hard Red Spring (14%)	bu	\$ 2.80	\$ 3.80	\$ 6.50
Hard Red Winter (11%)	bu	\$ 2.05	\$ 3.30	\$ 6.10
Soft White	bu	\$ 1.80	\$ 3.05	\$ 5.05
Forage				
Alfalfa Hay:				
Feeder*	ton	na	\$70	na
Dairy*	ton	na	\$85	na
Grass Hay*	ton	na	\$65	na
Corn Silage* (in the pit)	ton	\$18	\$22-24	\$26
Straw*	ton	\$20	\$25-40	\$45
Private Leased Forage	AUM	\$10.10	\$11.10	\$12.20
Range (state land)	AUM	\$ 4.16	\$ 4.90	\$ 5.53
Range (Federal land)	AUM	\$ 1.35	\$ 1.41	\$ 1.79

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.

* Field delivery. Does not use 10-year price history. See written discussion.

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

	Unit	Calendar Year Average				Long Term Ave.
		2002	2003	2004	2005-p	
Choice Steers 11 – 1300# *	cwt	67.51	83.30	84.52	87	72.22
Steers 8-900# *	cwt	72.02	81.71	93.92	98	73.19
Steers 7-800# *	cwt	75.36	84.63	96.42	108	75.51
Steers 6-700# *	cwt	79.41	89.65	104.43	113	80.10
Steers 5-600# *	cwt	83.99	94.61	114.93	124	85.15
Steers 4-500# *	cwt	92.37	102.38	121.97	134	90.82
Utility Cows 85% Lean **	cwt	40.95	46.22	53.31	54	45.99
Slaughter Lambs (125#)*	cwt	143.55	182.43	187.94	205	156.77
Feeder Lambs (70-90#)*	cwt	80.90	108.28	119.75	125	83.07
Sheep	cwt	29.90	33.70	40.40	42	31.02
Wool (Clean, USDA 56's)	lb.	1.19	1.48	1.50	1.14	1.15
Wool (Grease, US Farm Price)	lb.	0.53	0.73	0.80	0.67	0.65
Milk, Class III	cwt	10.42	11.42	15.39	13.98	12.31
Cheese, 40# Block, CME	lb.	1.1799	1.3172	1.6492	1.49	1.3721

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.