Oregon Agricultural Prices Received Index: An Explanation

Beginning with the Oregon Agri-Facts, Volume: 05-00, March 9, 2000 report, the Oregon Prices Received by Farmers Index was revised to the new "base period" of 1990-1992. The index base was also set at 1990-1992 = 100. This puts the Oregon index on par with the united States Prices Received by Farmers Index so the US and Oregon indexes can be directly compared. Federal Regulations require that the National Agricultural Statistics Service (NASS) publish parity prices, the indexes, and relevant price data in monthly Agricultural Prices publications. The Oregon Agricultural Statistics Service (OASS) is the Oregon office for NASS. NASS is an agency of the USDA.

Beginning in January 2004, refined weights and procedures were applied to the Oregon model. The adjustments allow the Oregon Prices Received Index to more accurately reflect the value and seasonal marketings of Horticultural products in Oregon. This industry now comprises over 25 percent of the value of agricultural production in Oregon. The Index was recalculated and published back through 1990.

The prices received index employs the methodology used in the current U.S. index. The index is composed of three index measures: crops index, livestock index and all commodity index. This includes rolling five-year average base weights and monthly marketing season weights by commodity. Five-year moving average weights based upon yearly USDA cash receipt estimates for Oregon are used. Seasonal marketing adjustments are used to adjust the 5-year moving weights to reflect the "normal" marketing pattern during the year for each commodity in the index. These monthly adjustments represent the percent of the commodity normally marketed during each month of the year. The monthly prices for the 36 month period were used to calculate the average commodity price for the base price and reference "base period" (1990-92) for each item in the index. Those prices were weighted by the quantity of the commodity sold in each of the 36 months. The linking month of the new weighting method to the old method is August 1992. This link is when the revised three index measures (crops, livestock and all) were the least different from the old indices.

The index measures the changes in Oregon agricultural commodities prices from month to month. Monthly average prices are tracked within seven commodity groups: 1. Field Crops, 2. Vegetable Crops, 3. Fruit & Nut Crops, 4. Horticulture, 5. Meat Animals, 6. Dairy Products, and 7. Poultry & Eggs. Because all commodities are not tracked, those used represent each group and represent the major commodities produced in Oregon. Commodities are Fescue Seed, Hay, Hops, Mint, Potatoes, Ryegrass Seed, Wheat, Snap Beans, Sweet Corn, Onions, Apples, Blackberries, Sweet Cherries, Hazelnuts, Pears, Strawberries, Shrubs, Trees, Christmas Trees, Cut Flowers, Bedding Plants, Potted Plants, Beef Cattle, Calves, Milk, Broilers and Chicken Eggs. As new data become available these prices are revised, if need be, on a monthly and annual basis. The prices are then weighted in the index per each commodity's relative weight (seasonal market share).

An annual index is also calculated for the three indices, crops, livestock and all. The annual index is a simple average of the calendar year months indices.

The index methodology is more highly representative of the commodity mix in Oregon and shows the seasonal variations due to changes of sales volumes by commodity during the various marketing seasons throughout the year.

The index has been worked back so that 10 years (1990-2000) of historic data are available using the new base period methodology. The 1910-1914 parity index will continue to be published. The web site for those records is $\frac{\text{http://www.oda.state.or.us/OASS/es.htm}}{\text{http://www.oda.state.or.us/OASS/es.htm}}$ The 1970 = 100 index is no longer calculated. Phone 503-326-2131 for additional information.