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## **April 2000 Idaho Agricultural Outlook**

by

C. Wilson Gray and Jim Robb, C. Wilson Gray, Paul E. Patterson,  
Larry D. Makus, Neil Rimbey, Steve Meyer and C. Wilson Gray.

Department of Agricultural Economics  
and Rural Sociology

University of Idaho

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April 2000

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Telephone: MU 2-1234

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## **Spring 2000: Beef Cattle Situation and Outlook**

By C. Wilson Gray and Jim Robb <sup>1</sup>

Optimism is in bloom along with the crocus and daffodils this spring in cattle country. Beef demand has actually increased slightly in the face of higher beef supplies, calf prices are strong, feed costs are reasonable if not downright cheap, and the grass is greening up. A great way to start the new millennium! The next few years should offer cattlemen a great opportunity to financially strengthen their operations. Doing that will require some strategizing and being willing to follow a plan of action to meet one's family and ranch goals. First, lets see just where we are in the big picture of things.

### **The current cattle cycle**

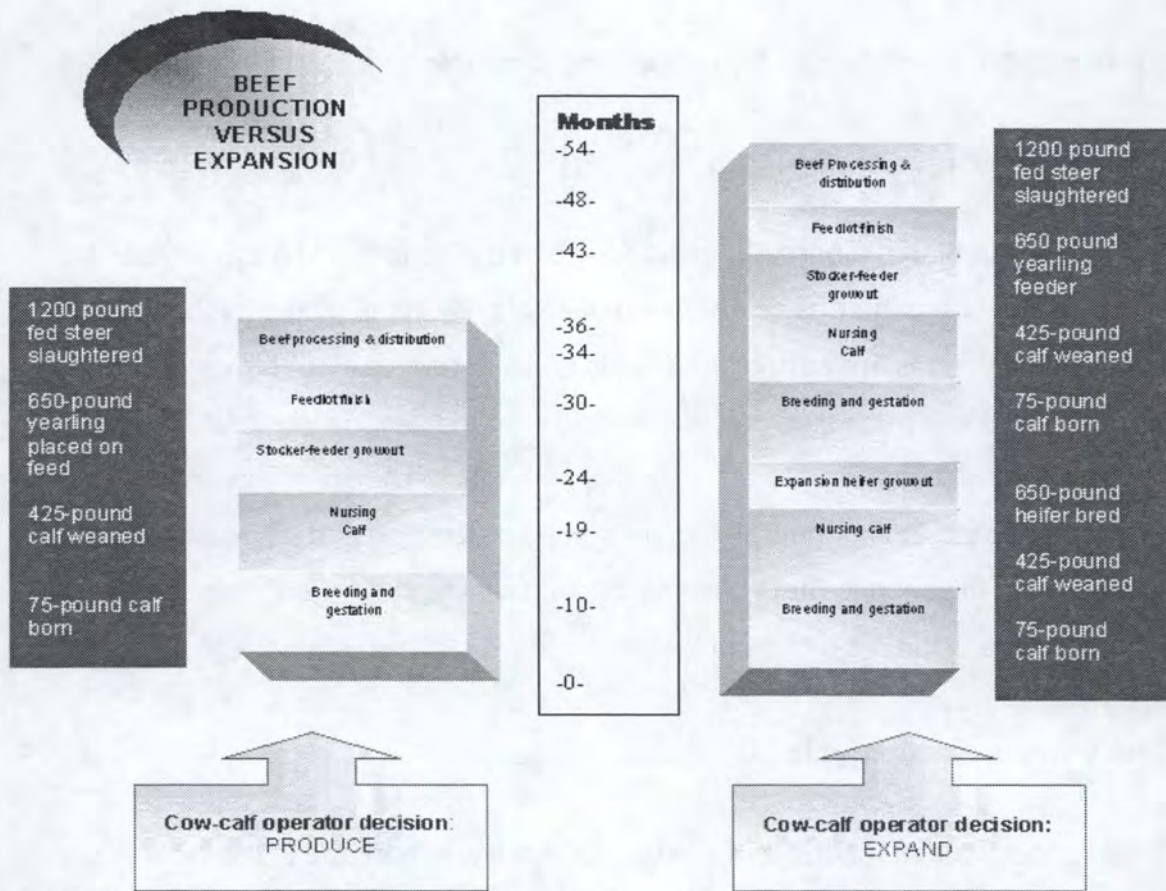
Cattle prices, and numbers, move in cycles. This is in part due to the biology of the beef cow (figure 1). Although there is considerable discussion on changing the genetics of beef cattle, no one has shortened the time from calving to a heifer entering the cowherd. Thus the cycle is still a viable entity we must deal with.

In a typical cycle, as price declines individual ranchers begin to increase culling and retain fewer heifers. Selling more female animals generates increased cash flow to meet obligations. This starts the liquidation phase of the cycle as we have experienced since 1996. Eventually, the beef cowherd becomes smaller, fewer calves are born each year reducing the supply of feeders for feedyards, and eventually prices turn around, a process that gained momentum in late 1999.

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<sup>1</sup> District Extension Economist, Agricultural Economics and Rural Sociology Department, University of Idaho, Twin Falls Research and Extension Center and Senior Analyst with the Livestock Marketing Information Center, Lakewood, CO





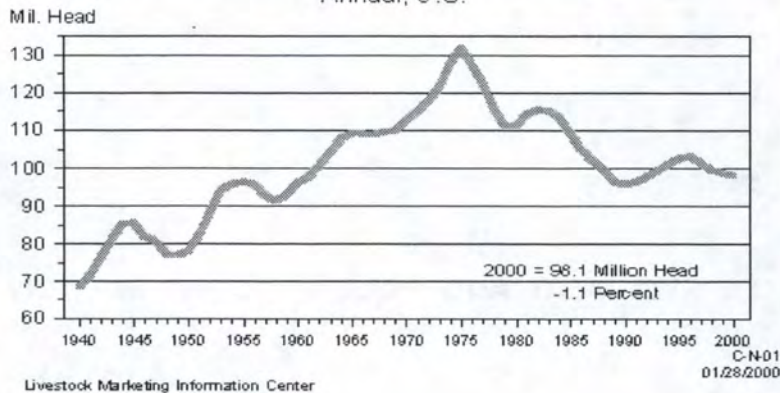
Producers then respond to the higher prices by holding back more heifers for replacements, culling fewer cows and further tightening of beef supplies for a few years until production begins increasing, where we'll likely be by 2003-2004. Then the supply side becomes burdensome, prices weaken and the cycle starts over again. The typical cycle lasts between 9 and 12 years, the initial three to four are the herd expansion phase, a year or two for turn around, then the four to five years of herd liquidation.

Beef cow numbers always lag prices by two to three years due to cow biology and how strong ranchers perceive the signal to save or sell heifers is. In the cycle just ended, prices first strengthened in late 1986, but numbers didn't show an increase until 1990, about 3 + years. Prices went sour in 1996 and stayed rather depressed into 1999.



## JANUARY 1 TOTAL CATTLE INVENTORY

Annual, U.S.



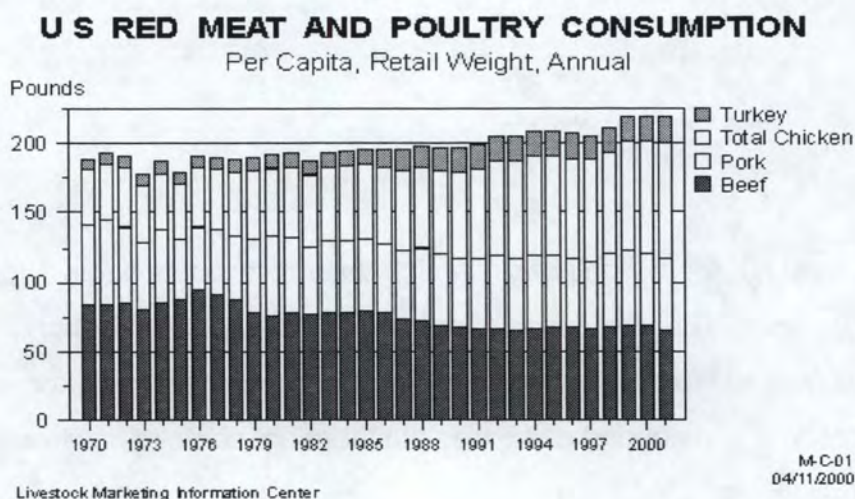
Breeding herd numbers won't begin to pick-up until ranchers begin adding heifers to their cowherds. That could start to happen this fall. Holding back heifers on ranches will provide further tightening of the supply of feeder cattle for feedlots. That situation should support calf prices but there are some things to watch for, more on that later.

### **What about BEEF demand?**

Modest year-to-year improvement in beef demand began to materialize in early 1999. That trend has continued into 2000. In essence for the first time in 20 years, the beef industry has had improved demand supporting higher beef and cattle prices. The clear sign of improved demand has been higher beef production (supply), but with higher prices. Still, fundamental beef demand remains below levels of the mid 1990's. Besides improved beef demand, pork and other red meat demand also have posted gains. A major price uncertainty for meat and cattle prices for the balance of 2000 and the next few years will be the demand situation.



Lots of factors influence demand. The bulk of the improvement in beef demand can be attributed to consumer incomes and resulting expenditures for consumption both at home and away from home. Other factors like food safety improvements, nutritional awareness, and new products also can influence demand and may be part of recent improvements.



Compared to last year, the year-to-year increase in beef demand added fully \$5.00 to \$6.00 per cwt. to fed cattle prices in recent months. That is if demand during January-March of 2000 had been the same as a year earlier, fed cattle prices would likely have averaged about \$63.00 to \$65.00 per cwt. instead of the well over \$69.00 actually posted. So, the modest improvement in demand has had a noticeable impact on cattle prices.

### **Total Meat and On-Feed Supplies**

Total U.S. meat and poultry supplies remain large. Forecasts for beef, pork and poultry production 2000 and 2001 have edged higher in recent months. U.S.



commercial beef production in 2000 will decline only modestly as the number of cattle placed on-feed during late 1999 and early 2000 was record large. Hog producers have begun to expand breeding animal numbers, which will translate into larger U.S. pork output in the second half of 2001. Tonnage of beef, pork and poultry continues to be bolstered by generally heavier carcass weights.

Total supplies of meat and poultry in the U.S. were record large in 1999. Further small increases are forecast for 2000 and 2001. So, consumers still have lots of meat-eating options. On a per capita basis, U.S. meat and poultry consumption is forecast to decline less than 1 pound in 2000 compared to the record large level of 1999.

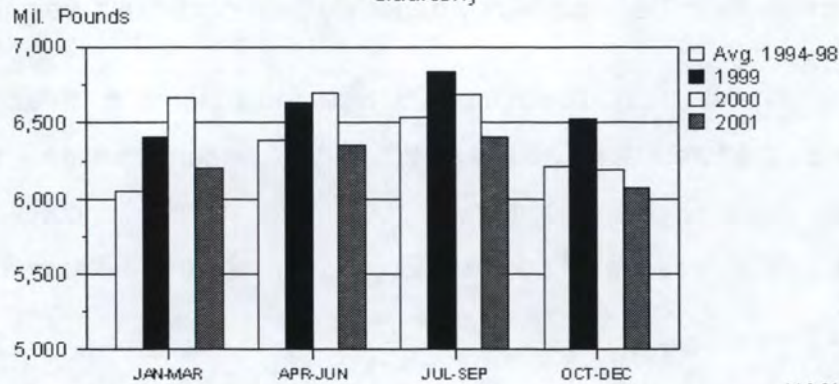
From a supply standpoint, a major factor that influences the cattle price is the tonnage of beef in the market. That tonnage is the result of the fed cattle situation. Cow-calf operations know that fed cattle price levels are directly linked to bids for calves and yearlings. As mentioned earlier, fed cattle prices have been supported by year-to-year increases in beef demand. From a supply standpoint, the cattle on feed numbers appear to be beginning to transition toward tighter supplies. Still, fed cattle supplies will be plentiful throughout at least June.

USDA's monthly Cattle on Feed reports showed record large numbers of cattle in feedlots during the first several months of 2000. In the face of large on-feed numbers, feedlots did a good job of marketing cattle late in the first quarter of 2000 and placements of cattle into feedlots began to moderate. If placements continue to post year-to-year declines this spring, as expected, fed cattle marketing's will begin to post declines compared to a year earlier this summer.



## COMMERCIAL BEEF PRODUCTION

Quarterly



Livestock Marketing Information Center

M-S-01  
04/11/2000

Cow slaughter also is expected to continue to post year-to-year declines throughout 2000. As was the case in early 2000, most of that decline will come from reduced beef cow culling.

### Feeder supply and Rancher Strategies

Most of the nations cow-calf and stocker operations posted positive returns over cash production cost in 1999. Cow calf returns in 1999 were the best in 5 years. U.S. commercial feedlots will deal with excess capacity (bunk space) in 2000. Feeding and stocker returns will probably be well below last year as profitability is bid out of these sectors and into feeder cattle and calf prices. Excess beef packer capacity will likely put their returns under increasing pressure also.

Available feeder cattle supplies at the end of 2000 will not be as large as at the end of 1999. This suggests slaughter levels in the first half of 2001 below this year's higher first half level. At this time, 2001 cattle slaughter is forecast to be 3 to 5 percent below this year.



With improved prices and optimistic discussion on where price levels are likely to be this year and next, some attention needs to be given to cycle management strategies. Harlan Hughes, Extension Livestock Economist at NDSU, has an interesting perspective on managing the cowherd via culling and heifer strategies to maximize net income over the cattle cycle. His strategy is outlined below. You may profit from giving this some thought and its feasibility with your operation.

#### Excerpted from the March 16<sup>th</sup> Market Advisor

Given the U-shaped beef price cycle we are experiencing in the cattle industry, should a producer cull his beef cows the same way up the beef price cycle as he did on the way down?

North Dakota's Cow Herd Analysis and Performance System (CHAPS) data suggest that ranchers cull 14 to 15 percent of their cows, on the average, on both sides of the price cycle. I suggest that changing a beef herd's culling rate as the herd progresses through a 10-year cattle cycle can result in an overall higher average net income for the complete cycle.

I suggest that on the downward side of the beef price cycle, when beef cows are netting very little profit or are even losing money (as in 1994 through 1996), you cull and cull deep. I suggest you remove the cows that are losing money and replace them with low-priced replacement heifers. Perhaps you've been thinking about changing the genetics of your herd. This low-price phase might be just the time to do so. Even the new genetics will be reasonably priced during the low-price phase of the beef price cycle. This is the time to get your cow herd up to maximum production potential -- however you define that for your herd. On the upward part of the beef price cycle (1999 through 2002), do not hold back any heifers for replacement and sell every calf born.

Since 1990, I have spent my spring months going from kitchen table to kitchen table analyzing the cost and returns from Integrated Resource Management (IRM) cooperators' beef cow herds. In 1990 through 1993, every cow I analyzed that had a calf, regardless of when the calf was born, made a profit. My economic analyses did not validate the standard recommendation to cull all cows with late-born calves. My economic analyses suggested that there is a time in a cattle cycle to cull and there is a time not to cull. I concluded that the high-price time of the beef price cycle is not the time to cull cows with late-born calves.

A better time to cull cows with late-born calves is during the decreasing portion of the beef price cycle. For example, from 1994 to 1996 calf prices went down dramatically. My kitchen table analyses suggested that while some high-producing cows generated a profit from 1994 through 1996, many of the low- and middle-producing cows did not.

Why not cull the cows that lose money and replace them with younger, better heifers? Then, when the beef industry returns to strong cattle prices (now through 2003), you can sell all calves born. Yes, I understand that you will probably need to



cull some cows from 1999 through 2003. So, reduce culling to an absolute minimum and just sell as many calves as possible during the high prices. Use the high-price time to build up a cash reserve preparing for the tough times that are projected to return again from 2005 to 2007.

Due to the nature of the 10-year beef price cycle, heifers born during the low-price period produce calves during the next high-price period. Heifers born during the high-price period produce calves during the next low-price period. For example, do any of you have your 1997 heifer calves? Let's see .... born in 1997, bred in 1998, and calve in 1999, 2000, 2001, 2002, 2003 etc. right over the top of the calf price cycle.

My data analysis suggests that 1997 born heifer calves were the second-most profitable replacement heifers held back. My data further suggest that the most profitable bred heifer started producing calves in 1987. If you did not hold back any 1997 heifer calves, no problem. You can hold back heifers again in year 2007. That is how the 10-year cattle cycle works.

Let's look at 1996 heifer calves. Remember how you had to give them away because nobody wanted 1996 heifer calves? Steer calves sold in the low \$60s and heifers were discounted \$10 to \$12 from steers. Let's see ... born in 1996, bred in 1997 and calve in 1998, 1999, 2001, 2002, 2003 etc. Again, right over the top of the calf price cycle.

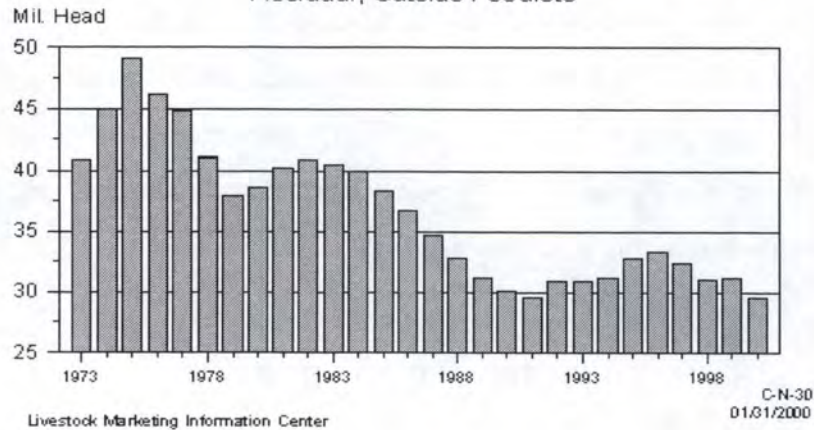
My recommendation is to develop a counter-cyclical culling strategy to enhance net income over the total cattle cycle. Cull deep when calf prices are low, generate cash flow from cull sales, and hold back low-priced heifer calves. Then, reduce culling when cattle prices are high, and sell all calves born. Use the high-price times to build a financial reserve for the next price low in the beef cow business.

The above perspective provides "food for thought." As the beef industry becomes more challenging in the years ahead, managing in the style of the 19<sup>th</sup> or even the 20<sup>th</sup> century won't cut it.



## JANUARY 1 FEEDER CATTLE SUPPLIES

Residual, Outside Feedlots



Another dimension that ranchers need to consider is managing their cull cow returns. A significant portion of rancher sales come from cull cows. As this cattle cycle develops, rather normal seasonal cull cow price patterns will likely return. During the major cow liquidation phase, cull animal prices tended to be rather flat (little seasonal pattern). But, for the next few years prices will likely return to the "normal" seasonal pattern, that is, prices will tend to be lowest in the fourth quarter and highest during the late winter and early spring months. In fact, that pattern has returned since last fall.

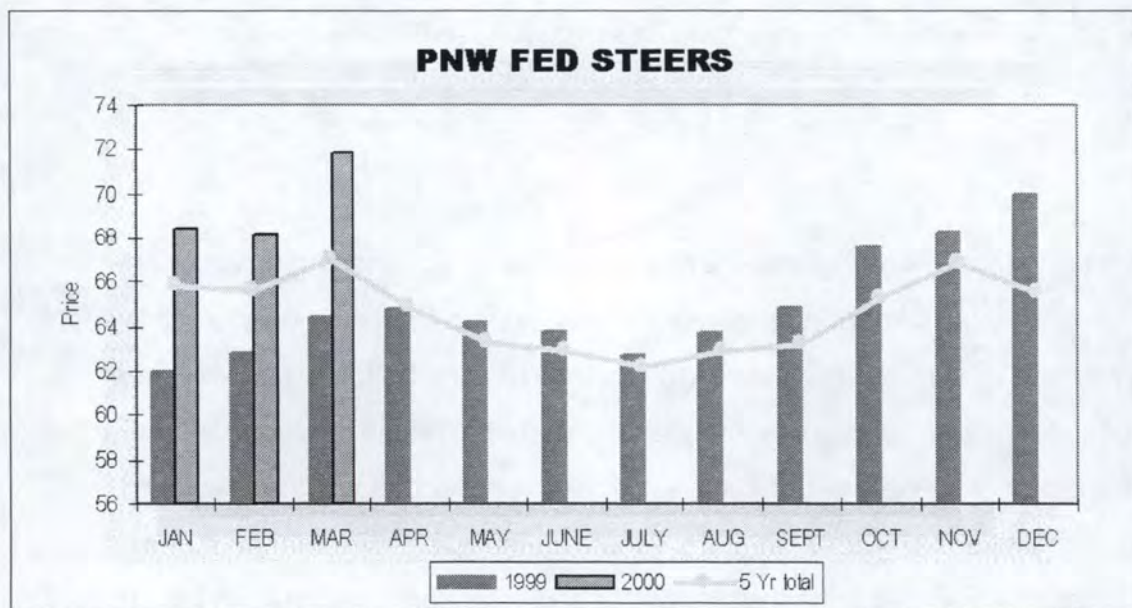
Many ranchers can take advantage of these seasonal cull beef cow price patterns by selling culls after the seasonal low prices of the fall quarter. Of course, forage supplies and costs to feed cull cows in the winter need to be evaluated.

### Price forecasts

Based on feedlot placements last fall and winter cattle slaughter is projected to be up 1.1 percent in the second quarter 2000 compared to 2<sup>nd</sup> quarter 1999. The

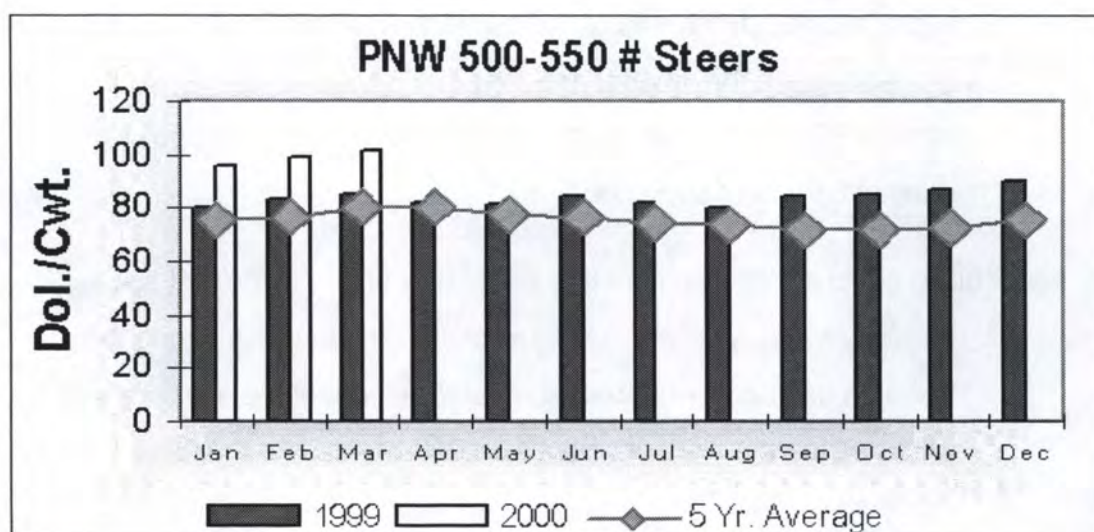
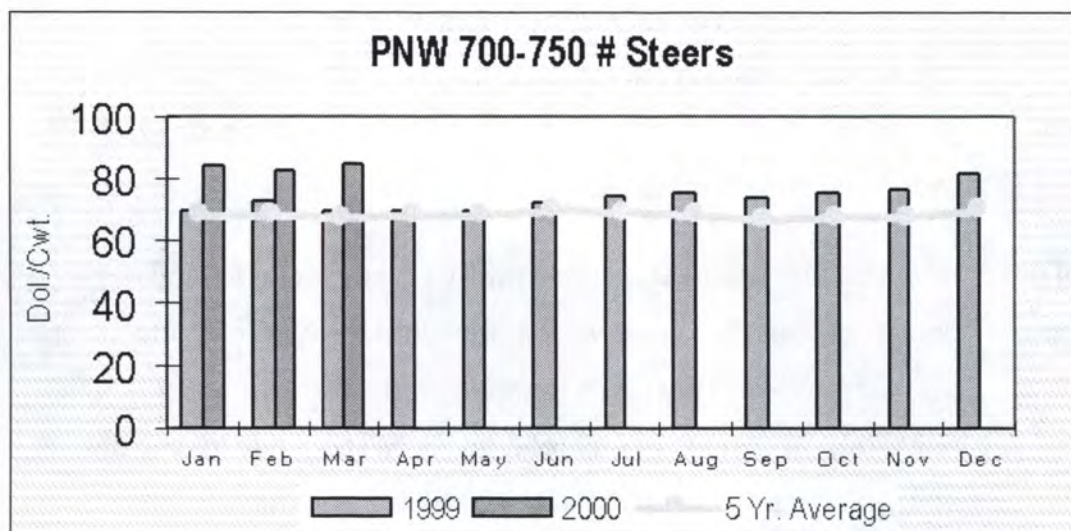


1<sup>st</sup> quarter was up 3.2 percent. For the second half of 2000, slaughter is expected to decline compared to year ago levels. Most of that year-to-year decline will come from reduced heifer slaughter. Lighter weights and fewer placements will also contribute to lower total beef supplies as 2000 progresses compared to last year. Beef production is anticipated to be up only 1 percent over a year ago in the 2<sup>nd</sup> quarter, and then drop under year ago levels in the second half. For the year 2000 beef production is expected to be down about ½ percent. If some of the things to watch below remain favorable, calf prices should remain favorable this year and into next.



PNW fed cattle prices averaged \$69.48 per cwt. in the 1<sup>st</sup> quarter. Fed prices are expected to average 69-70 in the second quarter, dip seasonally to 67-68 in the third quarter and move up to the low 70's in the 4<sup>th</sup> quarter. Heavy feeder steers (700-800 lbs.) averaged \$83.80 per cwt. in the first quarter. They are anticipated to average 80-82 in the second quarter, 82-84 in the third and 80-84 in the fourth quarter. For 500-600 lb. steers first quarter prices averaged \$98.74 per cwt. These lighter calves could average 97-99 in the second quarter and slip seasonally to 95-98 in the last half of the year.





### Things to watch

Moisture in the Corn Belt and potential crop size will set the stage for calf and yearling prices during the balance of 2000. It's been a dry winter in the mid-west. Recent storms have put drought fears to rest temporarily. There will likely be a weather market for grains throughout the summer. Any bad news will quickly spill over to cattle prices.



The drought in Texas and potential for another round of herd liquidation there.

Again, recent storms have helped but the cattle aren't out of the woods yet. Another dry year could force some liquidations or expensive supplemental feeding.

Rate of heifer retention and its affect on prices will be a key factor for cattle prices. Higher feed costs will get translated very quickly into lower bids for feeders. That could dampen enthusiasm for heifer retention. Continued cheap feed prices will continue to aide calf and yearling prices and make the cost of replacements dear.

The "other white meat" (pork) could make a fast recovery. Typically the hog sector would not have increasing inventories until fall 2001. Early indications are that inventories may start building late this year or early in 2001. That would increase competitive meat supplies against tight beef supplies.

Dairy herd culling could accelerate later this year. Milk prices in the first half will barely cover day-to-day costs for most. To return to the long term trend on dairy cow numbers at least 2 percent of the existing herd will need to be culled, or about 160,000 head, over the next 9 to 12 months.

Poultry production is expected to increase by 3 to 5 percent this year, boosting another competitor's supplies.

Is the positive shift in beef demand permanent or temporary? Time will tell but it will be tested soon. Higher fuel prices, the recent disenchantment with dot.com stocks and already high levels of consumer debt are starting to leave some folks feeling maybe its time to tighten their belts a bit.



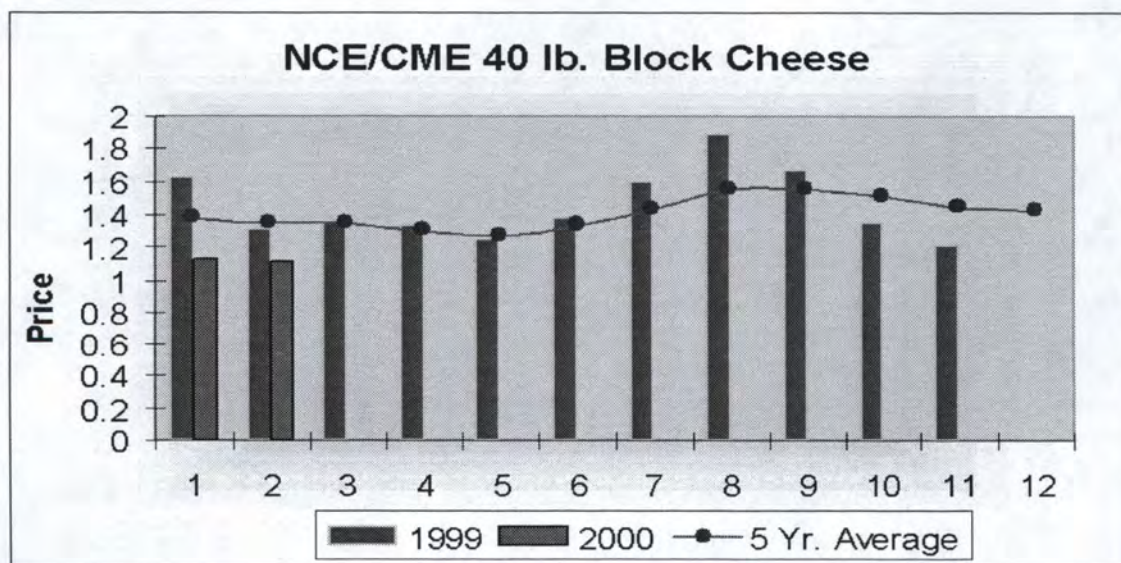
## Spring 2000 Dairy Outlook

By C. Wilson Gray <sup>1</sup>

So far, there seems to be little in the news to alter the outlook for continued low dairy prices. Dairy cow numbers have not abated, and the financial market news indicates inflation may be stirring, pushed by higher fuel and food costs, and higher retail prices. The Commodity Credit Corporation (CCC) is purchasing dairy products for the first time since 1997.

### Stocks Situation

Stocks in all warehouses of dairy products in February were up 12 percent compared to a year-ago. Stocks rose 6 percent between January and February. American type cheese, up 11 percent from a year ago, accounts for a large share of the increase.



The April Dairy Products report had February American type cheese production

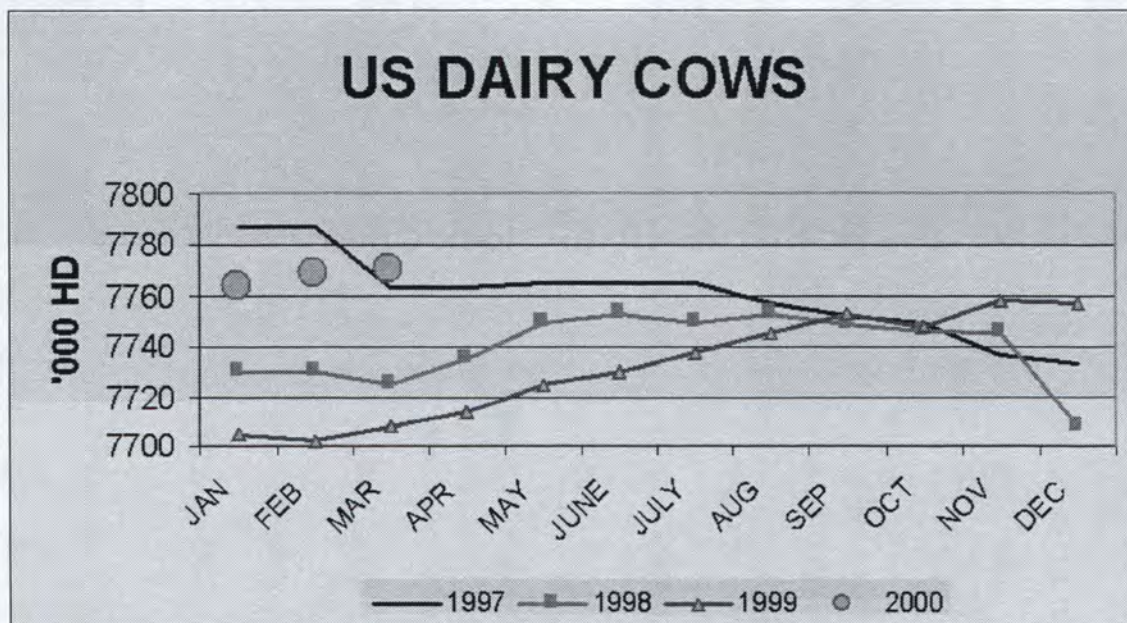
<sup>1</sup> District Extension Economist, Agricultural Economics and Rural Sociology Department, University of Idaho, Twin Falls Research and Extension Center.



of 297.4 million pounds. Even adjusting for the extra day in February that represents an annual increase of 3.5 percent. The strong continued growth in cheese and other product reflects the continued strength of milk production and the near full capacity situation of processors.

## Supplies and Prospects

With both milk production and dairy cow numbers continuing to grow, especially in the western dairy states, total milk supplies have continued to increase. March production in the 20 reporting states was up 3.8 percent compared to a year ago. Compared to a year ago, February production was up 4.5 percent after adjusting for the extra day. In March, 57,000 more cows were in dairies than a year ago and there were 4,000 head more than in February. In the 20 monthly reporting

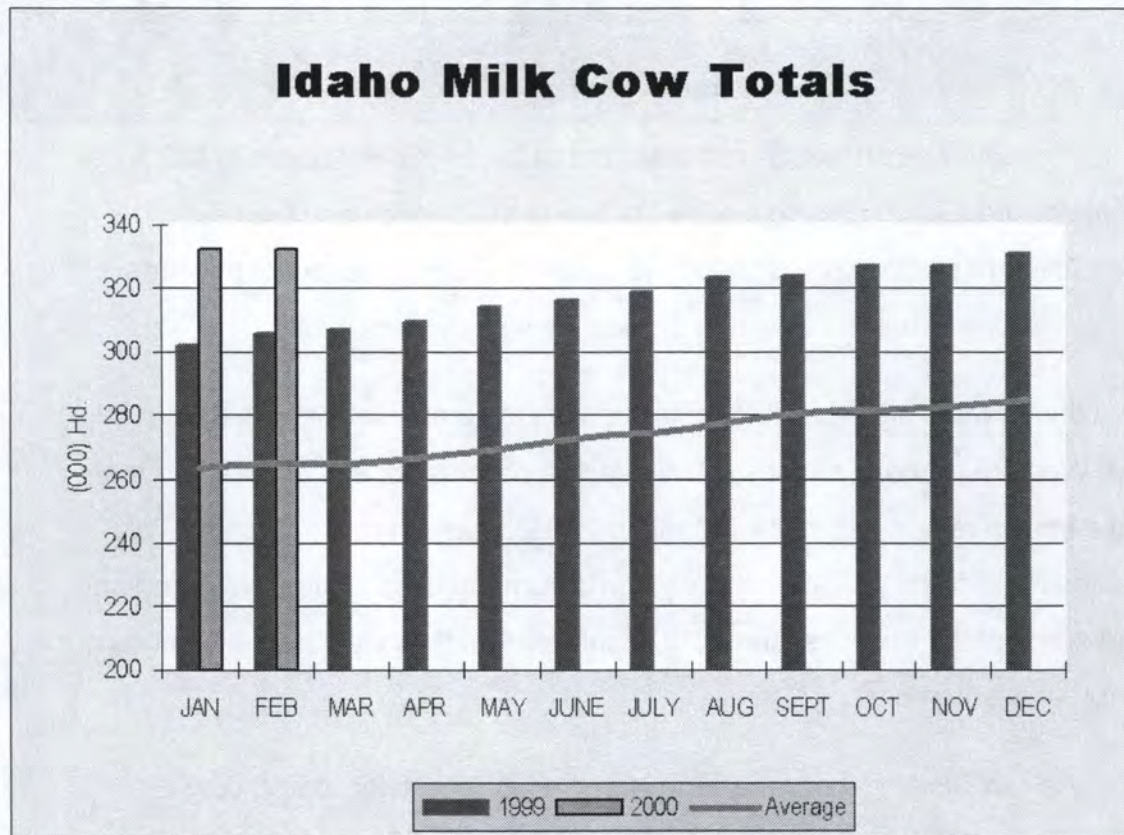


states, seven had increased cow numbers while 11 had declined compared to March 1999. The increases more than offset the decreases. Five of the states with increased numbers are in the West (AZ, CA, ID, NM and TX), with California up by 48,000 head, and 2 (PA, IN) are East of the Mississippi. With the continued trend of strong growth the Pacific region (CA-WA-OR) may replace the Lake States (WI-MN-MI) as the largest milk producing region this year. Each region produced 23 percent of the nation's milk in 1999, but with 400,000 fewer



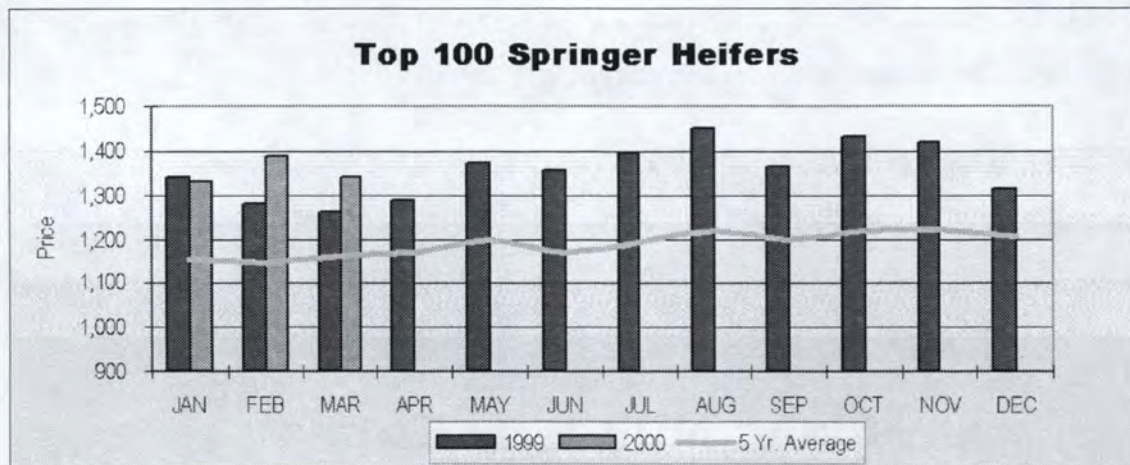
cows in the Pacific region. California is the principle milk shed in the Pacific region with 19 percent of the nation's output.

Per cow production increased in almost every state. Mild weather and cheap feedstuffs have made life more productive for most dairy cows. In the Pacific region per cow output is over 3,600 lbs. higher than in the Lake States.



When and where will the current low prices translate into the "supply response" of curtailed production come? Not from the West. The higher prices of 1998-99, environmental concerns and other factors have fueled an expansion round not yet complete. Many of these new dairies (often 2,000 to 4,000 head facilities) don't yet have enough stock to fill the pens. Heaviest demand is coming from Idaho and New Mexico for stock outside the state. This pressure has supported heifer prices in the face of depressed milk prices.





Processors in western states are also continuing to expand capacity to handle the extra production coming on-line. Which is the chicken and the egg, production or processing, is difficult to answer. But processors at this time appear willing to meet expanding production with more capacity.

Two things will likely happen for milk supplies to come into line with demand. The Western round of expansion will reach a conclusion, and other areas that have shown recent declines will continue to decrease in cow numbers. This means most of the adjustment likely come from the Lake States, New England and some of the Mid-west states. It is unlikely that these factors will balance out before this summer.

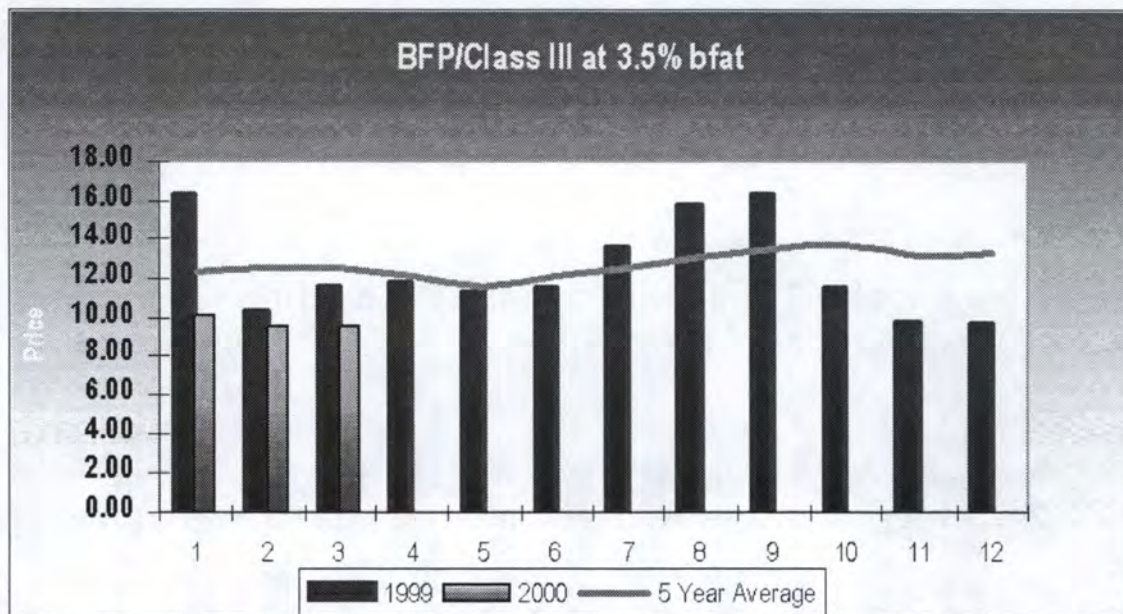
As an aside, the long-term trend has been for dairy cow numbers to decline about 1 percent per year. That has been in reverse with numbers climbing lately. In order to get back on trend about 160,000 head or 2 percent need to be culled based on current dairy cow numbers.

## Price Prospects

The above implies that for the next few months continued building of dairy product stocks and continued low prices. The Class III price is unlikely to surface above the \$10 mark until July or August. Further, Class III prices are likely to languish under \$12 most of the second half of the year. The first quarter average



for the Class III price was \$9.71. The Class III futures contracts would project a second quarter average of about \$9.80 per cwt. That is likely on the optimistic side of observations. Third quarter prices could average between \$10 and \$11 per cwt. Fourth quarter prices are likely to average between \$10.75 and \$12 per cwt. This assumes among other things that cow numbers start declining by June and US production falls low enough to allow using some of the stocks being built up currently.



## Things to Watch

**Milk Production report:** Monitor monthly milk production estimates which include information on cow numbers, milk per cow and total milk production.

**Dairy Product report:** This monthly report provides information on cheese, butter, non-fat dry milk and other dairy products. Coupled with the monthly Cold Storage report an indication of how fast stocks are building can be gleaned.

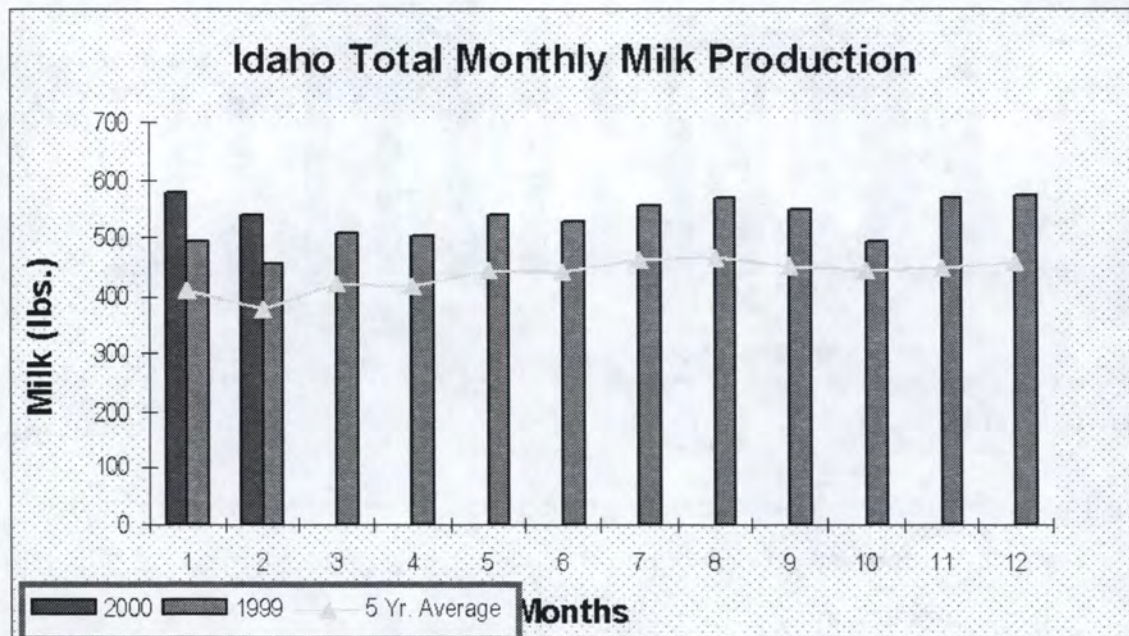
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winter in the mid-west. Recent storms have put drought fears to rest temporarily. There will likely be a weather market for grains throughout the summer

Is the economy ready to tank too? Time will tell but it will be tested. Higher fuel prices, the recent disenchantment with vcom stocks and already high levels of consumer debt are starting to leave some folks feeling maybe its time to tighten their belts a bit.

Dairy Policy: Already another round of dairy Market Loss Assistance payments is proposed and the ink is barely dry on the last cheques. Other items are in the works also.



### Other Dairy News

The Dairy Options Pilot Program is in Round II. The PNW states are participating in this go round to aid dairymen in developing risk management skills.

Extension of the dairy support program through 2002 has been proposed in Congress. The bill also seeks to increase the support level to \$12.50 from \$9.90 on 3.67 percent butterfat milk.

Cottonseed Futures contracts should begin trading on the Minneapolis Grain Exchange this summer. The proposal is for 120-ton contracts in January, March, May, August and November.

The Chicago Mercantile Exchange has proposed a Class IV futures contract. This fall would be the first trading opportunity if the contract clears the process for approval.



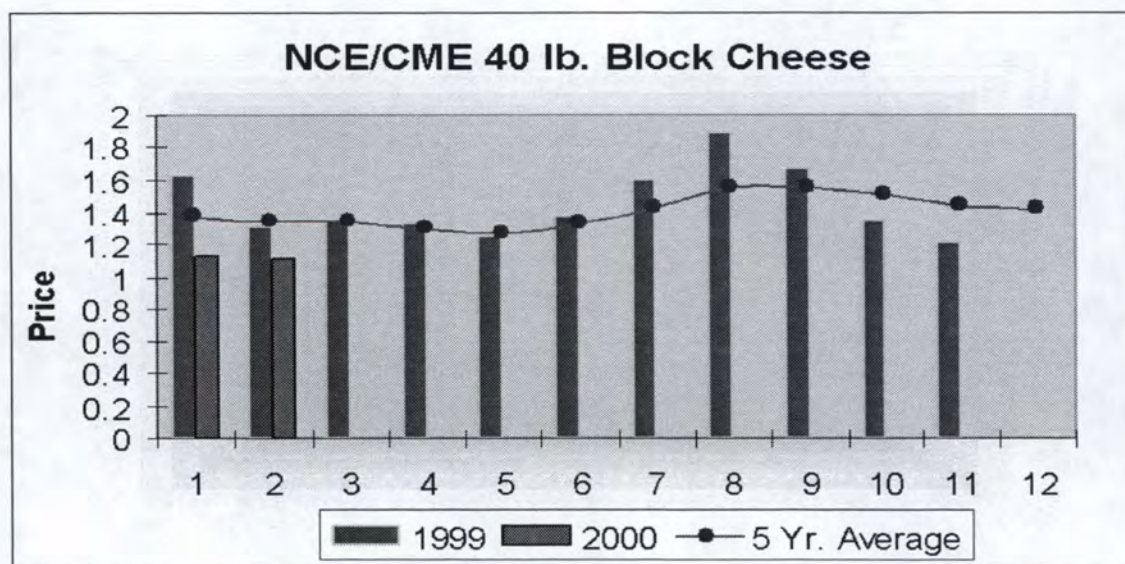
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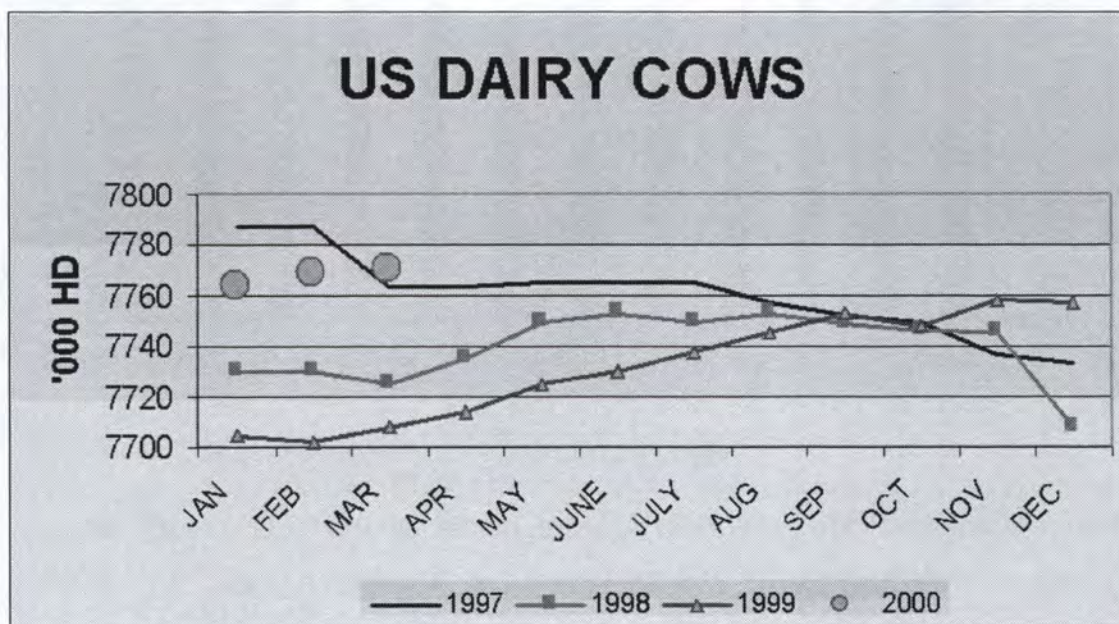
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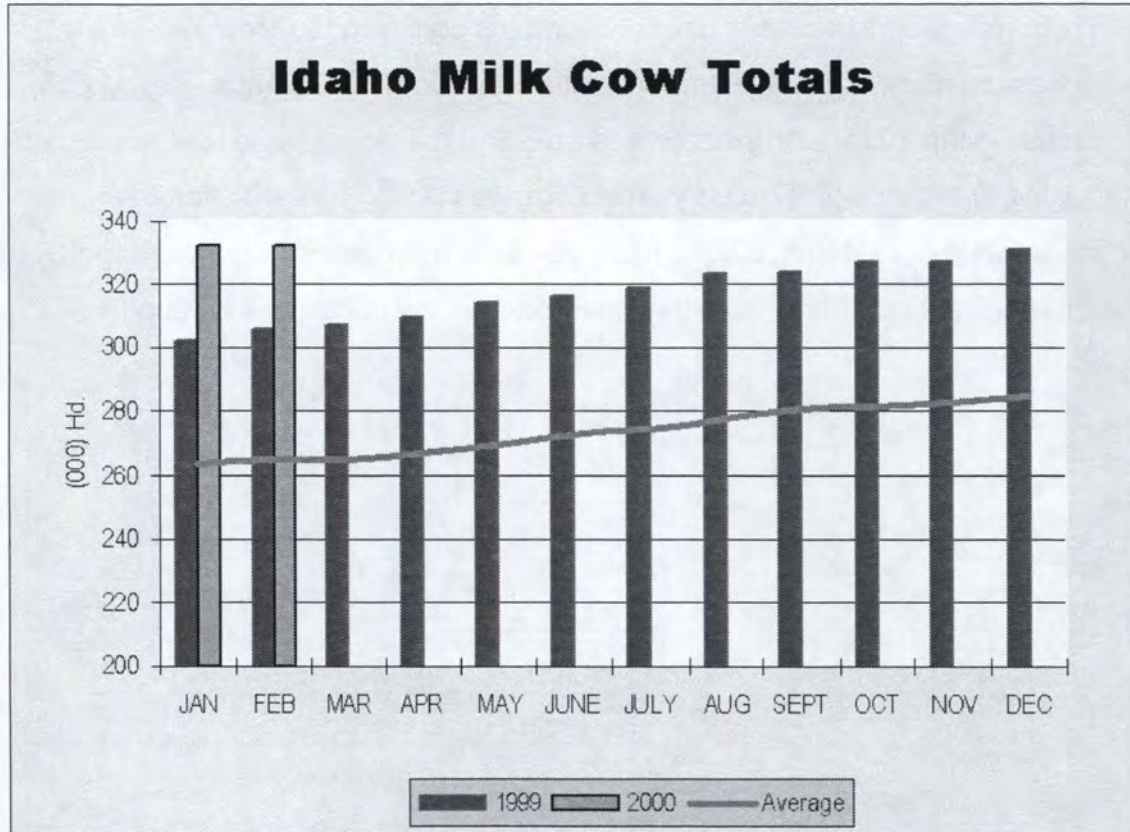


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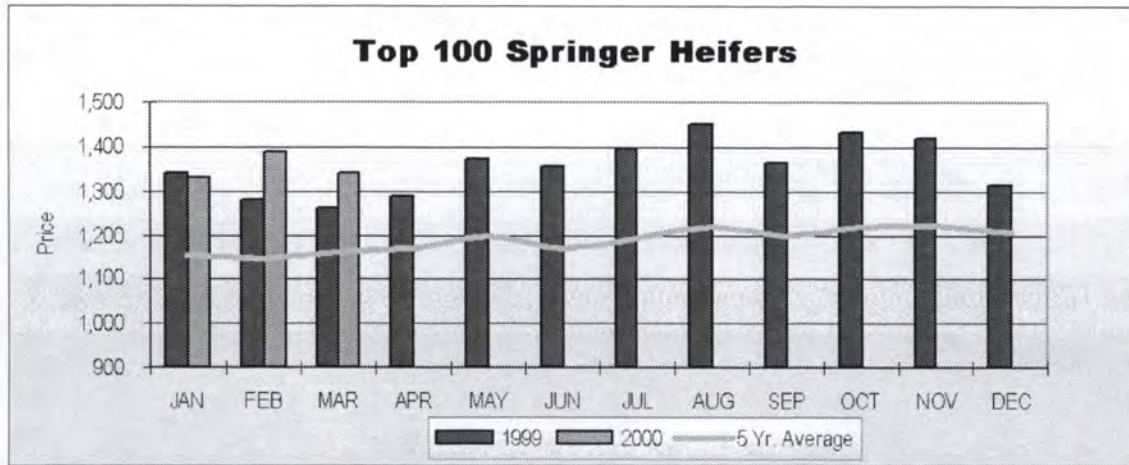
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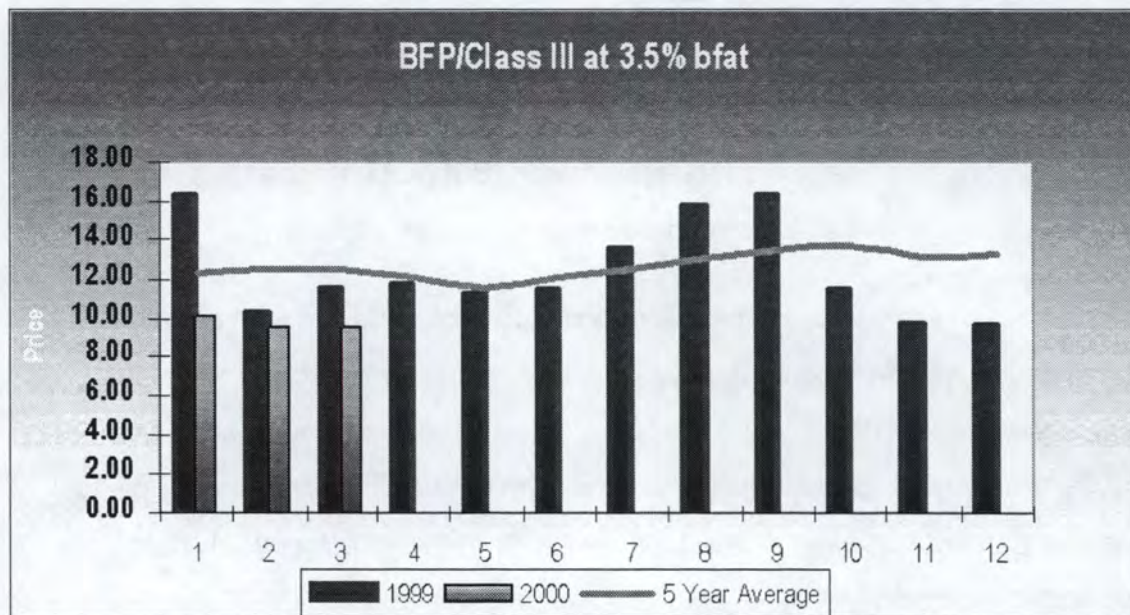
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## Price Prospects

The above implies that for the next few months continued building of dairy product stocks and continued low prices. The Class III price is unlikely to surface above the \$10 mark until July or August. Further, Class III prices are likely to languish under \$12 most of the second half of the year. The first quarter average



for the Class III price was \$9.71. The Class III futures contracts would project a second quarter average of about \$9.80 per cwt. That is likely on the optimistic side of observations. Third quarter prices could average between \$10 and \$11 per cwt. Fourth quarter prices are likely to average between \$10.75 and \$12 per cwt. This assumes among other things that cow numbers start declining by June and US production falls low enough to allow using some of the stocks being built up currently.



## Things to Watch

**Milk Production report:** Monitor monthly milk production estimates which include information on cow numbers, milk per cow and total milk production.

**Dairy Product report:** This monthly report provides information on cheese, butter, non-fat dry milk and other dairy products. Coupled with the monthly Cold Storage report an indication of how fast stocks are building can be gleaned.

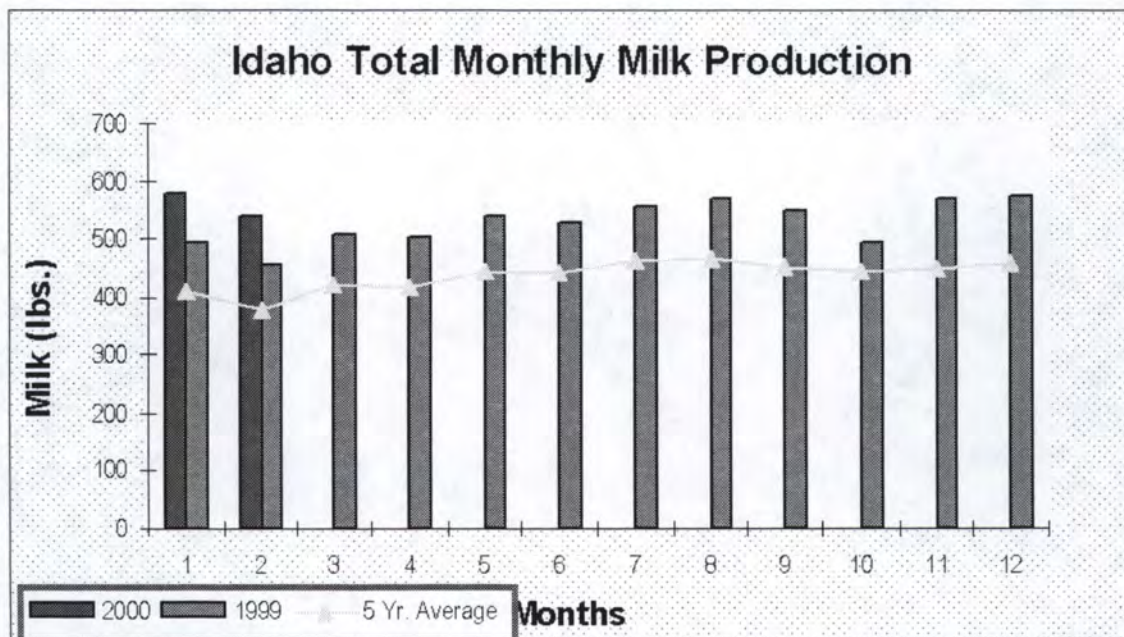
**Crop production:** Moisture in the Corn Belt and potential crop size will set the stage for feed prices during the balance of 2000. It's been a dry



winter in the mid-west. Recent storms have put drought fears to rest temporarily. There will likely be a weather market for grains throughout the summer

Is the economy ready to tank too? Time will tell but it will be tested. Higher fuel prices, the recent disenchantment with vcom stocks and already high levels of consumer debt are starting to leave some folks feeling maybe its time to tighten their belts a bit.

Dairy Policy: Already another round of dairy Market Loss Assistance payments is proposed and the ink is barely dry on the last cheques. Other items are in the works also.



### Other Dairy News

The Dairy Options Pilot Program is in Round II. The PNW states are participating in this go round to aid dairymen in developing risk management skills.



Extension of the dairy support program through 2002 has been proposed in Congress. The bill also seeks to increase the support level to \$12.50 from \$9.90 on 3.67 percent butterfat milk.

Cottonseed Futures contracts should begin trading on the Minneapolis Grain Exchange this summer. The proposal is for 120-ton contracts in January, March, May, August and November.

The Chicago Mercantile Exchange has proposed a Class IV futures contract. This fall would be the first trading opportunity if the contract clears the process for approval.



## **Idaho Edible Dry Bean Situation Outlook, April 2000**

Prepared by Paul E. Patterson  
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Dry edible bean growers are suffering through another marketing year with disappointing prices. Growers who switched to dry beans trying to avoid low prices on other commodities did not find the relief they had sought. Why such low prices? In a nutshell, supplies are too high and demand is too low. The 1999 U.S. dry edible bean crop was the second largest of the past ten years and the third consecutive year that the crop was bigger than the previous year's. The production increases occurred despite falling prices because most growers had no viable alternatives. While growers did respond to the low prices in the 1998/99 marketing year by planting fewer acres in 1999, a nearly 200 pound increase in the average U.S. yield more than offset lower production from the reduced acreage. While domestic utilization remains steady, lower than expected exports have kept demand weak and contributed significantly to the lower prices.

Growers will attempt to reduce the abundant dry bean stocks by planting fewer acres to dry beans in 2000 according to USDA's March Prospective Plantings report (Table 4). But Mother Nature could always confound farmers' plans -- as happened last year—or farmers could change their plans and plant more acres to dry beans. Even if we assume that last year's record yield will be repeated in 2000, production would fall to around 31 million cwt in what I would call the worst case price outlook scenario. With just an average yield of 1,600 cwt per acre, production would fall to 27 million cwt. Low prices should help improve export demand and Mexico has allocated import certificates for 48,000 metric tons of duty free dry beans from the United States. With reduced supplies and better demand, prices for the 2000 crop will improve compared to 1999 as stocks decline. Growers should see prices average \$2 – 4 per hundredweight higher in the 2000/01 marketing year.

### **Review of 1999-00 Marketing Year**

Depressing is the best term to describe dry bean markets over the fall and winter months. Even though prices at harvest were below cost of production, they were the highest prices that growers have seen this marketing year. Prices in March were from \$1 to \$3 lower than last fall. Pinto prices that started the marketing year in the \$17.25-17.75 range were down to \$15.50 in January and down another dollar to \$14.50 in March. The price of Great Northerns held



up better than other classes. They started the marketing year in the \$17.25 to \$17.50 range and were at \$16.75 to \$17 by January. By early April they had moved up to \$17. While it would be hard to call this a price rally, Great Northern beans are the only class of beans grown in Idaho to experience any price improvement. Pinks were trading in the \$16 to \$16.25 range at harvest and were mostly \$13.75 by the first of the year. They dropped another \$.25 by February and have stayed at \$13.50. Small Reds experienced a similar decline. They were trading at \$16.50 to \$17.25 at harvest and were down to \$14 by February where they've remained.

Idaho's average dry bean price reported by the Idaho Agricultural Statistics Service, a composite price for the various bean classes grown in Idaho, peaked at \$17.10 in October. It is now under \$15 and will likely average around \$15.80 for the September to August marketing year (Table 1). This is over a dollar off the 1998/99 marketing year average price of \$17.

Because supplies appear to be more than adequate to meet current demand, it is unlikely that dry bean prices will improve much in the last half of the 1999-00 marketing year even though June prices are typically the highest of the marketing year, at least on average. Examples of how prices have historically changed from March to June are shown in Table 2. Price changes are calculated for a 5-year average, a 10-year average and the 1998 marketing year prices for Pintos, Great Northerns, Small Whites, Pinks and Small Reds.

Exports for the first three-quarters of calendar year 1999 were 29 percent below the same period for 1998. Exports were off for all classes of dry beans. For the dry bean classes grown in Idaho, Great Northerns were off 45.6 percent, Pintos were off 25.9 percent and Small Reds were off 15.9 percent. Small Whites are not tracked as a separate class for exports.

### **2000 Planting Intentions**

U.S. projected-planted acreage for 2000 is down 186,000 acres, or nine percent from 1999. This is certainly positive news and should help reduce the stocks of dry beans that are weighing down the market. But the actions of individual states certainly need to be considered when evaluating the planting intentions report, particularly for the impact by market class.



Together, North Dakota, Colorado, Nebraska and Idaho accounted for 81 percent of the Pinto production over the last three years. North Dakota, which accounts for one-third of the U.S. dry bean acreage, is down only three percent, or 20,000 acres. Keep in mind that Pintos have accounted for around 70 percent of North Dakota's acreage in recent years and they have been producing over 40 percent of the U.S. Pinto crop. Colorado and Nebraska, the other two major Pinto states besides Idaho, will decrease planted acreage by 13 and 14 percent, respectively, or 50,000 fewer acres growing dry beans. Over the past three years, 86 percent of the acreage in Colorado has been planted to Pintos, and in Nebraska it has been over one-third. Idaho is projected to plant 15,000 fewer acres of dry beans, for a 14 percent reduction. Only 30 percent of Idaho's dry bean acreage was planted to Pintos in 1999, compared to 39 percent and 42 percent in 1997 and 1998. Idaho's share of the Pinto production is also declining. Idaho produced 6.0 percent of the U.S. Pinto crop in 1999, 6.3 percent in 1998 and 7.7 percent in 1997.

Nebraska and Idaho combined produce over 90 percent of the Great Northerns. But Nebraska alone accounts for 85 percent. The 14 percent acreage reduction in Nebraska, 30,000 acres, when combined with Idaho's acreage reduction should definitely help the price outlook for Great Northerns.

While Small Whites, Small Reds and Pinks are less important than Pintos in Idaho when measured by acreage or production; Idaho tends to dominate the production of these three bean classes (Table 3). Because these three classes are a relatively small share of the total dry bean market, an acreage change in Idaho can dramatically affect production and therefore price of these classes. An acreage reduction in Idaho can certainly be viewed as positive news for all three of these bean classes.

### **Projections For 2000-01**

Trying to predict prices for individual market classes is extremely difficult considering the lack of accurate stocks information. Because I lack information to the contrary, I'm assuming that the percentage acreage changes predicted for 2000 will be proportional on all market classes grown in that state. With exports expected to be up and production expected to be down, prices on all bean classes should move up in 2000/01. The price improvement will not be uniform, however. Small Reds appear to have the weakest fundamentals, and with no acreage reduction projected for Washington and only a 6 percent reduction for Michigan, it's difficult to see prices moving much above \$16. The current fundamentals are also fairly poor for Pinks, but reduced production based on the 2000 planting intentions should reduce supplies since two of the three big Pink producing states are reducing acreage. Idaho will be down 14 percent and



Minnesota is projected to be down 22 percent. The one fly in the ointment is North Dakota, projected to be down only 3 percent. The price for Pinks should return to the \$16.50 to \$17 range. The fundamentals for Small Whites and Great Northern appear to be about the same. The major producers of these classes will either be down or unchanged. Prices of both classes should return to the \$18 to \$20 range. Pintos, the largest class produced in Idaho, presents the biggest challenge in trying to predict a price range this year. Three of the major players, Colorado, Idaho and Nebraska are all projected to plant 13-14 percent fewer acres. But THE big player, North Dakota, is only predicted to reduce acreage by 3 percent. Pinto prices in the \$16 to \$18 range are most likely for the 2000/01 marketing year. The high end of the range could go up another dollar with strong export demand to Mexico.

The average dry bean price discussed here and shown in Table 1 is the average of all bean classes reported by the Idaho Agricultural Statistics Service. Unless constrained by weather, U.S. dry bean production in 2000 should fall between 28 and 30 million cwt. Production at these levels should keep the average Idaho price for the 2000/01 marketing year in the mid to high teens, \$16 to \$19 per cwt. While U.S. production over 30 million cwt is unlikely, Idaho's average price would stay in the \$14-16 range if it did occur. U.S. production between 26 and 28 million cwt would mean an average Idaho dry bean price around \$19 - 21 per cwt. The price scenarios for the 2000 crop assumes exports of at least 8.5-million cwt and steady domestic utilization. If exports were to hit the 10 million cwt level as they did in 1998, prices would average \$1.00-\$2.00 higher across the various production scenarios that I've presented. Also keep in mind that my projections are based on the projected dry bean acreage given in USDA's March Plantings Intentions report. Actual acreage planted will be different. The issues are how much different and will the differences be positive or negative. But unless there is some unexpected constraint on production or exceptionally strong export demand, prices will remain below cost of production when all costs are included. With total production costs of around \$500 per acre, Idaho growers would need prices close to \$22 to break even.



**Table 1. Dry edible bean production, price and exports.**

Marketing Year	U.S. Production (million cwt)	U.S. Exports <sup>1/</sup> (million cwt)	Idaho Production (1,000 cwt)	Average Idaho Price <sup>2/</sup> (per cwt)
1994-95	28.95	7.8	2,691	\$18.90
1995-96	30.69	8.1	2,160	\$20.90
1996-97	27.91	9.0	1,907	\$23.65
1997-98	29.37	7.8	2,156	\$21.00
1998-99	30.42	10.7	2,112	\$17.05
5-yr Average	29.47	8.7	2,205	\$20.30
1999-00 <sup>3/</sup>	33.08	7.8	2,112	\$15.80
2000-01 <sup>4/</sup>	28 - 30	8.5 - 9.5	1,800 - 1,900	\$17 - 19

Source: USDA: Vegetable and Specialties Yearbook, July 1999, unless noted otherwise.

<sup>1/</sup>Exports are for the calendar year. <sup>2/</sup>Prices are simple averages for crop marketing year Sept. 1 - Aug. 31.

<sup>3/</sup>US and Idaho production are USDA estimates from the December 1999 Crop Production Report. Idaho's price is the author's forecast.

<sup>4/</sup>2000 values are the author's forecasts.



**Table 2. Price change from March to June for dry edible bean prices in Idaho.**

Time Frame	Pintos	Great Northerns	Small Whites	Pinks	Small Reds
5-Year Average: 1994-98	+\$1.70	+\$0.10	+\$0.00	+\$0.80	+\$0.55
10-Year Average: 1989-98	+\$1.35	+\$0.00	-\$0.25	+\$0.35	+\$0.75
1998/99 Marketing Year	-\$0.50	-\$0.40	-\$0.40	-\$0.30	-\$1.40

Source: Weekly Dry Bean Report, Greeley, CO. Agricultural Marketing Service, USDA.

**Table 3. U.S. dry bean production by class and Idaho's share, 1996-99.**

Year	Pintos 1,000 cwt	Great Northerns 1,000 cwt	Small Whites 1,000 cwt	Pinks 1,000 cwt	Small Reds 1,000 cwt
1996*	12,123 (8.1%)	2,239 (7.5%)	113 (50.4%)	528 (31.6%)	405 (64.9%)
1997	10,929 (7.7%)	2,251 (5.3%)	183 (42.1%)	699 (46.5%)	892 (51.8%)
1998	14,511 (6.3%)	2,173 (7.3%)	60 (51.7%)	919 (40.6%)	660 (41.7%)
1999	11,111 (6.0%)	2,483 (5.5%)	102 (50.9%)	824 (50.6%)	900 (45.4%)

Source: USDA, National Agricultural Statistics Service : Crop Production, December 1999.

\* USDA, National Agricultural Statistics Service: Crop Production 1998 Summary.

Percentages in parenthesis are Idaho's share of production for that market class.



Table 4. Dry edible beans planted acres by state, 1998-2000.

	Area Planted			2000/1999 Percent
	1998 (1,000 acres)	1999 (1,000 acres)	2000 <sup>1/</sup> (1,000 acres)	
California	110.0	135.0	120.0	89
Colorado	170.0	155.0	135.0	87
Idaho	105.0	105.0	90.0	86
Kansas	20.0	22.0	20.0	91
Michigan	300.0	350.0	330.0	94
Minnesota	190.0	205.0	160.0	78
Montana	16.6	26.5	29.0	109
Nebraska	195.0	210.0	180.0	86
New Mexico <sup>1/</sup>	10.5	1.0		
New York	31.0	31.0	35.0	113
North Dakota	750.0	630.0	610.0	97
Oregon	8.7	11.5	6.0	52
South Dakota <sup>2/</sup>			11.0	
Texas	15.0	50.0	22.0	44
Utah	6.0	6.7	6.7	100
Washington	40.0	36.0	36.0	100
Wisconsin	7.3	8.3	8.0	96
Wyoming	39.0	40.0	38.0	95
U.S.	2,014.1	2,023.0	1,836.7	91

Source: USDA: Prospective Plantings, March 31, 2000. Excludes beans grown for garden seed.

<sup>1/</sup> Projected.

<sup>1/</sup> Estimates discontinued for 2000.

<sup>2/</sup> Added to planting intentions estimating program in 2000.



## **WHEAT AND FEED GRAINS**

Prepared by Larry D. Makus  
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### **Current World Situation for Wheat and Coarse Grains**

World wheat and coarse grain markets are heading into the 2000/01 marketing year with issues similar to what have been observed for the last couple of years. Supplies are at relatively high levels because production has been consistently high, and prices are stuck at relatively low levels. Any major change toward favorable price prospects must come from a substantial drop in grain production for the 2000 crop year.

Wheat: The 1999/00 world wheat crop is currently forecast at 587.0 million metric tons (MMT) (Table 1). Although down slightly from last year, the 1999 world wheat crop is still the 4<sup>th</sup> largest world wheat crop on record. Additionally, 1999 follows the two largest world wheat crops on record (1997 and 1998). In spite of this relatively large crop, consumption is projected to exceed production for the 1999/00 crop year. Thus, world stocks are projected to decline to 125.8 MMT by the end of the current marketing year. The declining world stocks to use ratio (Table 1) also suggests world wheat stocks continue to move in the right general direction for a price recovery. The big question is when stock levels will reach a point to support wheat prices at significantly higher levels. If the world produces another relatively large wheat crop, stocks may decline slowly similar to the last couple of years. An average or below world wheat crop should reduce world stocks enough to get the stocks to use ratio below 20 percent, which appears to be the magic number for the market to show some excitement.

Coarse Grains: World coarse grain production is projected to drop by 18.5 MMT or 2.1 percent in 1999 (Table 1). US production of feed grains is expected to be down about 8



MMT, and foreign production down about 10 MMT. After increasing substantially in 1998/99, world ending stocks are projected to decline from 155.4 to 146.4 MMT (5.8 percent) for the 1999/00 marketing year. Similar to wheat, more than adequate supplies are the significant issue for world coarse grains as the new crop year approaches.

## **US Wheat and Feed Grain Situations**

Tight supplies for US grains (especially feed grains), was the driving force in setting record high farm level prices for corn and wheat during the mid-1990's. Since that time, large world and US grain crops have put substantial downward pressure on prices. US ending stocks for both corn and wheat continue at near record high levels for the decade, although both are projected to decline slightly in 1999/00.

Wheat: The 1999 US wheat crop is forecast at 2.302 billion bushels, well below 1998's crop of 2.547 billion bushels (Table 2). However, lower projected domestic feed use of wheat and only slightly larger projected US exports mean ending stocks remain essentially unchanged at just under 1 billion bushels. US wheat carryovers for 1998/99 and 1999/00 represent the two largest carryovers of the decade. Farm level wheat prices for 1999/00 are currently forecast at \$2.50, which is the lowest level since the mid-1980s.

US white wheat production totaled 247 million bushels in 1999, well below the previous two years (Table 2). In spite of lower white wheat production, large US supplies of all wheat have weighed heavily on white wheat prices. Portland prices held above \$3.00 through most of November, dropped to the \$2.80 to \$2.90 range late in November, and have stayed in that range through March. The Portland average price for the 1999/00 marketing year (July-March) has averaged \$3.02. That is about 52 cents per bushel above the projected US farm level price of \$2.50. The historical average differential between the Portland and US average wheat price is 41 cents per bushel. It appears any potential price benefit from lower white wheat production was generally overshadowed by lower exports and lower domestic use for white wheat (Table 1).



Feed Grains: Projected US corn production for 1999 is currently at 9.437 billion bushels. This represents a drop of just over 300 million bushels from 1998, but 1999 is still one of the larger US corn crops on record. For the other 1999 feed grains, grain sorghum production is projected to increase by over 14 percent to 595 million bushels, barley production is down almost 20 percent to 282 million bushels, and oats are down 12 percent to 146 million bushels. Total US feed grain production is down almost 3 percent to 263.1 MMT. Due to higher domestic use, US feed grain ending stocks are expected to decrease by almost 4 percent. Farm level corn prices for 1999/00 are currently projected in the \$1.85 to \$1.95 per bushel range, just below last year's \$1.94 level. Due to tighter supplies, barley prices are projected to increase slightly in the 1999/00 marketing year. The average farm level price for barley is projected at \$2.15 per bushel (\$90 per ton) compared to \$1.98 per bushel (\$82 per ton) in 1998/99.

### **Outlook for 2000**

The world grain markets have experienced relatively large crops for the past four years. World supplies are certainly adequate, but not so burdensome as to suggest 2000 grain production doesn't matter. The pattern is similar to what we have seen for the last 3 years. If 2000 is another year of relatively good production levels, grain markets maintain the status quo with little or no price improvement. Below average production levels have the potential to bring about significant price gains. Thus, growing conditions as the 2000 crop year approaches is again the critical factor. The USDA will provide the first official estimates of 2000 world and US grain production in the May 12 WASDE report.

Wheat: US wheat supplies remain at relatively high levels following several years of historically tight world supplies in the mid-1990s. The 1999/00 drop in world ending stocks to 125.8 MMT (Table 1) provides continued encouragement. Keep in mind the market will likely not become terribly excited until the world ending stocks forecast gets down into the 105 to 110 MMT range. Market fundamentals provide little encouragement for a



substantial price rally for the remainder of the 1999/00 marketing year without news of a significant production problem somewhere.

The 2000 wheat crop is certainly the key to any opportunity for a substantial price increase between now and this coming summer. US wheat projected plantings are down 2 percent from last year, and the lowest level since 1972/73. Crop conditions have improved in the HRW wheat belt, but remain below last year. In assessing the situation at this point, several issues seem relevant. First, the world wheat crop has been at record (or near record) levels for four consecutive years. The "law of averages" suggests that favorable weather patterns may not continue, and a smaller world wheat crop is the likely outcome. This same statement was relevant last year, but the "law of averages" has increased the probability for a reduction since it didn't occur last year. Second, this year's low price levels should discourage wheat plantings and reduce world wheat production. The March Wheat Yearbook provides a country by country analysis of wheat production prospects for 2000, and concludes the outlook is uncertain at this point. Some areas, particularly the EU, are projecting significant increases in acres planted to wheat. For the US, lower acres coupled with average yields suggest a wheat production decline of about 8 percent to 2.12 billion bushels. Although lower production will reduce US stocks and improve prices, the big question is how much prices will improve. The good news is that prices should move in the right direction, but the bad news is prices have a long ways to go.

Although some price improvement is expected as the 2000 marketing year progresses, relatively high US carryover is likely to cap any major price recovery. The author is projecting an increase in farm level wheat prices, but not a dramatic increase. The projected increase in farm level wheat prices from \$2.50 to \$3.00 is based on two important factors. An average to slightly below average yield and a stronger export market due to reduced world production (Table 2). Portland white wheat prices are somewhat more problematic. Planted acreage in the PNW is projected to decrease less than the national average. Additionally, crop conditions are well above the national average at this point. A larger white wheat crop for the upcoming year seems likely at this point. Although



white wheat prices may face more pressure on the supply side, it will benefit from lower production of all wheat. Portland's average marketing year price are expected to increase from about \$3.00 in 1999/00 to \$3.40 for 2000/01.

Feed Grains: US projected plantings for feed grains are generally up for the 2000 crop based on the March Prospective Plantings report. Corn acres are up 1 percent over last year, barley is up 10 percent, and grain sorghum is down 3 percent. Dry conditions in the corn belt remain an issue, and it is likely early to project production at this point. However, large carryover and the prospect for increased acres will likely burden the market for the remainder of the 1999/00 marketing year. Barley may be particularly impacted by supply concerns with the large projected increase in acres planted. Moisture conditions in the mid-west as spring and summer approach is the big issue for all feed grains for the remainder of this marketing year and for 2000/01.



Table 1. World Wheat and Coarse Grain Production, Use, and Ending Stocks, Marketing Years 1997/98 to 1999/00 and estimated for 2000/01

	Production		Use		Ending Stocks		Stocks to Use Ratio (%)
Year	MMT	Annual % Change	MMT	Annual % Change	MMT	Annual % Change	
Wheat							
1997/98	609.3	+ 4.5	584.5	+ 1.4	138.4	+22.4	23.7
1998/99	589.2	- 3.3	591.8	+ 1.2	135.8	- 1.9	22.9
1999/00	587.0	- 0.4	596.9	+ 0.9	125.8	- 7.4	21.1
2000/01	580.0	- 1.2	590.0	- 1.2	115.8	- 8.0	19.6
Coarse Grains							
1997/98	884.1	- 2.6	876.6	- 0.1	136.2	+ 6.7	15.5
1998/99	889.5	+ 0.6	870.3	- 0.7	155.4	+14.1	17.9
1999/00	871.0	- 2.1	880.1	+ 1.1	146.4	- 5.8	16.6

Notes:

MMT = Million Metric Tons

Annual % change represents the percent change (+ for an increase; - for a decrease) from the previous year.

1997/98, 1998/99, and 1999/00 marketing year estimates are from the USDA's April World Ag. Supply & Demand Estimates (WASDE) report.

2000/01 marketing year projections for wheat are from the author.

Coarse grains include corn, barley, grain sorghum, oats, and rye.



Table 2. U.S. Wheat and White Wheat Balance Sheets for Marketing Years 1997/98 to 1999/00.

	Marketing Year			
	1997/98	1998/99	1999/00	2000/01
	(billion bushels)			
<u>Wheat</u>				
Beginning Stocks	0.444	0.722	0.946	0.943
Production	2.481	2.547	2.302	2.120
Total Supply	3.020	3.373	3.338	3.143
Domestic Use	1.257	1.384	1.320	1.250
Export	1.040	1.042	1.075	1.200
Total Use	2.298	2.427	2.395	2.450
Ending Stocks	0.722	0.946	0.943	0.693
Stocks to Use Ratio (%)	31.4	39.5	39.4	28.3
Avg. Farm Price (\$/bu)	\$3.38	\$2.65	\$2.50	\$3.00
<u>White Wheat</u>				
	(million bushels)			
Beginning Stocks	59	90	87	79
Production	332	301	247	300
Total Supply	399	401	340	387
Domestic Use	104	116	101	110
Export	205	198	160	190
Total Use	309	314	261	300
Ending Stocks	90	87	79	87
Avg. Portland Price (\$/bu)	\$3.67	\$3.04	\$3.02	\$3.40

Notes:

1997/98, 1998/99 and 1999/00 marketing year estimates are from the USDA's April World Ag. Supply & Demand Estimates (WASDE) report.

2000/01 marketing year projections are from the author.

Portland average price is based on weekly average prices for the marketing year (July through June) for 1997/98 and 1998/99. For the 1999/00 marketing year, the average Portland price is for July through March.

Total supply includes imports.



## **Hay Update, Spring, 2000**

Neil Rimbey

Range Economist, Caldwell R&E Center

Several pieces of hay market information have been released by USDA since we moved into Y2K. The final crop production estimates for 1999 were released in the Crop Production Annual Summary in January. December 1 Hay Stocks on farms were released in the January Crop Production monthly publication. Finally, the Planting Intentions report released in late March shows what growers in Idaho and other states are intending to do with their hayfields in 2000. This article will attempt to review this data and make some projections on the 2000 hay crop for Idaho.

### **1999 Hay Production and Supply**

Final 1999 Hay Production figures released in January show that Idaho hay growers produced 5.1 million tons of hay (4.6 million tons of alfalfa) on 1.43 million acres (1.15 million acres of alfalfa), an average of 3.59 tons per acre (4 tons per acre on alfalfa). Carryover stocks from the 1998 crop sat at 777,000 tons on May 1, 1999. Total hay supply (production plus carryover) going into the winter was 5.909 million tons. Alfalfa hay production was adjusted down by USDA from their earlier estimate in October. Total supply was slightly under the record level from the 1998 crop. Table 1 presents Idaho Hay Production and Supply information for the past 25 years.

### **December 1 Hay Stocks**

USDA also released the December 1 Hay Stocks figures in the January Crop Production report. This release is important because it indicates whether the hay crop is moving through marketing channels or remaining in stacks on farms and ranches. This report indicated there were 2.617 million tons of Idaho hay still on



farms and ranches in the state. Comparing this stocks figure with total supply, one can see that over half of the hay supply had been sold or fed as of December 1 (Table 1). This December stocks figure is substantially lower than what we saw during the 1997 and 1998 crop marketing periods. Watch the May 1 hay stock figure that will be released in the May Crop Production report. This will provide an estimate of the carryover from the 1999 crop and can be used to calculate the 2000 hay supply.

### Planting Intentions and the Potential 2000 Hay Crop

On March 31, 2000, USDA released the Prospective Plantings report. Idaho hay growers indicated their intention to have 1.4 million acres of hay during the 2000 production season. This is a decline of 30,000 acres from 1999 (2 percent reduction). Idaho hay growers have been producing an average of about 3.6 tons per acre of hay over the past 5 years. Using this figure and the intended acreage in hay, we can derive a production estimate for the 2000 crop of 5.04 million tons. If May 1 stocks return to a level of 500,000 tons or less, total supply would be about 5.5 million tons. This would be substantially lower than what we have seen in the last 2 years (Table 1). This supply picture, coupled with increasing demand from the dairy sector indicates potential for higher hay prices with the 2000 hay crop. How much higher is dependent upon factors that will affect hay production over the next 5 to 6 months. Until we start seeing some acreage and production estimates along with the weather situation during harvest and demand indicators, price forecasts at this point are pretty nebulous. Again, monitor Crop Production reports in May (May 1 Stocks), July (acreage), August (production) and October (production) to track hay production and supply estimates through the year.



Table 1. Idaho Hay Production and Supply, 1975-1999 (1,000 tons).

Year	Hay Stocks Jan 1/Dec 1*	Hay Stocks May 1	Alfalfa Production	Other Hay Production	Total Crop Production	Total Supply <sup>1</sup>
1975	2878	576	3811	630	4441	5017
1976	2576	533	3621	580	4201	4734
1977	2899	798	3852	607	4459	5257
1978	3344	1026	4050	658	4708	5734
1979	3531	1083	3631	495	4126	5209
1980	2682	619	3815	580	4395	5014
1981	3120	835	3960	493	4453	5288
1982	3073	757	3774	672	4446	5203
1983	2712	489	4017	897	4914	5403
1984	2850	393	3938	805	4743	5136
1985	3036	522	3570	510	4080	4602
1986	3304	245	4180	540	4720	4965
1987	4008	1086	3978	525	4503	5589
1988	3648	901	3496	385	3881	4782
1989	2183	310	3720	380	4100	4410
1990	2287	485	3744	340	4084	4569
1991	3221	408	4120	380	4500	4908
1992	2193	644	3367	288	3655	4299
1993	2955	292	4200	644	4844	5136
1994	2263	678	3978	460	4438	5116
1995	2794	222	4180	570	4750	4972
1996	2285	660	4200	560	4760	5420
1997	2743	286	4100	630	4730	5016
1998	3329	520	4859	690	5549	6069
1999	2617	777	4600	532	5132	5909
<b>Avg</b>	<b>2901.24</b>	<b>605.80</b>	<b>3950.44</b>	<b>554.04</b>	<b>4504.48</b>	<b>5110.28</b>
<b>Max</b>	<b>4008</b>	<b>1086</b>	<b>4859</b>	<b>897</b>	<b>5549</b>	<b>6069</b>
<b>Min</b>	<b>2183</b>	<b>222</b>	<b>3367</b>	<b>288</b>	<b>3655</b>	<b>4299</b>

<sup>1</sup> Total supply = May 1 stocks plus current year's production.



## **Spring 2000 Lamb and Wool Outlook**

By Steve Meyer and C. Wilson Gray <sup>1</sup>

As we move into the new millennium the lamb market has improved above year ago levels. Wool is not doing as well but down the road things could improve some there as well. With the apparent improvement in both pork and beef demand last year, is there a "trickle down" effect for lamb too?

The national sheep flock has been in a liquidation mode since 1990. This is the second longest since the 19 year liquidation that began in 1970. With-in the marketing year some changes have also occurred.

### **Seasonality of Lamb Prices**

Seasonal price and production patterns in the sheep industry are not new concepts. Historically in the U.S., it was expected that lamb prices would rise to peak sometime around the Easter holiday. At the same time, lamb production was also expected to peak. Lamb prices and production were then expected to decline into the summer. Production then was expected to increase into the Fall quarter (October-December), but prices would continue to decline.

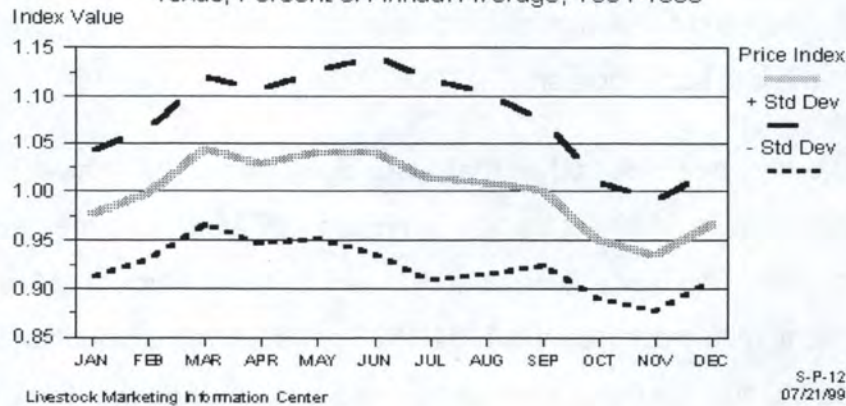
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### SEASONAL PRICE INDEX -- SLAUGHTER LAMBS

Texas, Percent of Annual Average, 1984-1998



Changes in supply and/or demand cause seasonal price patterns. Lamb is a traditional Easter dinner and demand at that time of the year is the strongest. With the traditional decline in demand following Easter also came reduced production. But, biology caused a great number of U.S. lambs to become market ready in the fall. Without a corresponding increase in demand, prices fell to their seasonal low for the calendar year in the fall.

Since 1994, only one year (1997) has come close to following this traditional seasonal pricing pattern. Prices in the other four years peaked during the summer rather than at Easter. But has the seasonal price pattern truly changed?

Comparing seasonal indices for the 1994-1998 Texas slaughter lamb prices with seasonal indices for the 1989-1993 Texas slaughter lamb prices suggests that the price pattern has changed. During the earlier period, slaughter lamb prices typically peaked in March at around 110 percent of the annualized average price. Prices did not bottom until November at 92.6 percent of the annualized average price. During the later period, prices typically peaked in June and bottomed in November through January.



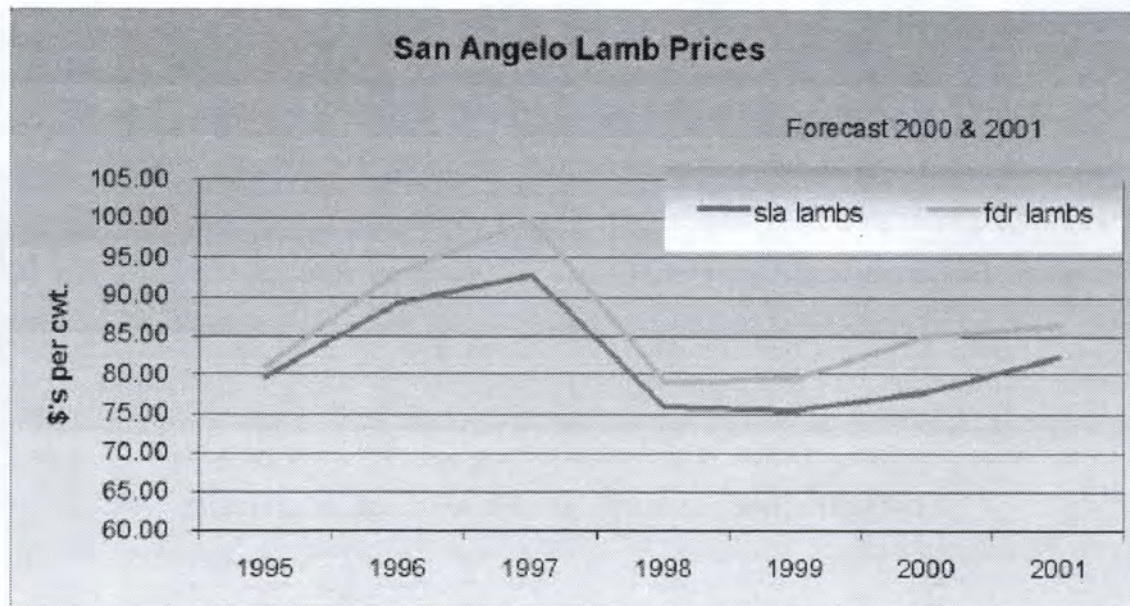
Statistically speaking, the indices for March, April and May of the later period (1994-98) were smaller and significantly different from the earlier period. The August and September indices for the later period were larger and significantly different from the August and September indices from the earlier period. Does that mean that demand for slaughter lambs has declined in the spring and resurfaced in the late summer, early-Fall?

Although there may be some truth to that, the biggest part of the answer probably has been alterations in relative seasonal lamb availability. During the 1989-1993 period, lamb production typically peaked in March at 114.9 percent of the annualized monthly average. By the 1994-1998 period, lamb production still peaked in March, but was now 124.6 percent of the annualized monthly average production. The August and September indices fell from 95.9 and 97.4 percent of the annualized monthly average production in the earlier period to 91.7 and 93.4 percent of the annualized monthly average production in the later period. In essence, seasonality of U.S. lamb production has increased in recent years.

When comparing the two periods from a statistical standpoint, March and April indices were significantly different while August and September indices were marginally significant. So, a large part of the change in the seasonal lamb price pattern was due to a change in seasonal lamb production.

This increased seasonality in U.S. lamb production was bolstered by increased seasonality in lamb imports. The seasonal indices for imports indicate that imports in March moved from 119.7 percent of the annualized monthly average in the 1989-93 period to 137.3 percent of the annualized monthly average in the 1994-98 period (marginally statistically significant). This has caused total lamb availability (domestic production and imports) in March to move from 115.4 percent of the annualized monthly average in the earlier period to 127.3 percent of the annualized monthly average in the later period.





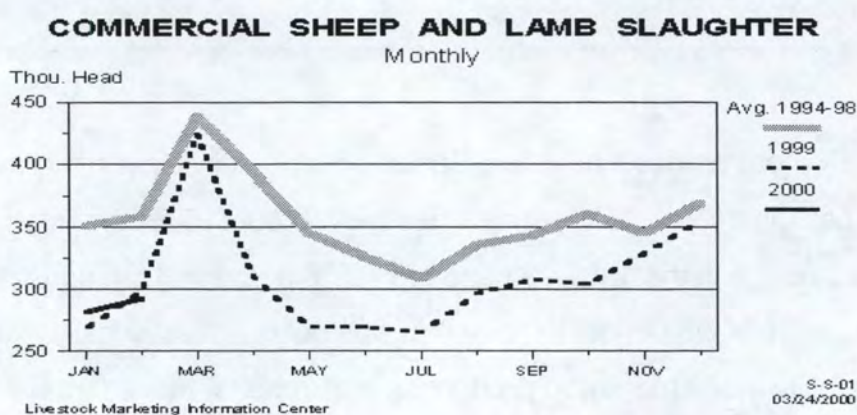
But, relatively more production around Easter does not fully explain the move to a summer peak in prices. July's price index moved from 97.5 percent of the annualized average in the 1989-93 period to 107.6 percent of the annualized average in the 1994-98 period, a move that was not quite statistically significant. July's availability index (domestic production and imports) moved from 93.2 percent of the annualized monthly average in the earlier period to 86.3 percent of the annualized monthly average in the later period, not quite a statistically significant move. It is difficult to establish the statistical significance of summer changes due to data volatility over recent years. Still, reduced seasonal availability during the summer appears to have contributed to the changes in seasonal prices.

From this, it appears that a slight alteration in availability (moving some lamb production and/or imports from March into later periods (especially summer) of the year) would return the lamb industry to the more historic pricing pattern. Given the size of the industry, it may not take much in volume to dramatically alter price patterns. Currently, it looks like the seasonal price pattern established over the last few years may again hold in 2000.



## Lamb Demand

During January, U.S. lamb production was 6 percent above a year ago. The lamb cutout value was above a year earlier (0.5 percent). But slaughter lamb prices ranged from steady to 10 percent below a year ago. In contrast, feeder lamb prices ranged from steady to 20 percent higher than 1999's.



So, on the surface it appeared that demand for lamb meat was improving (higher production with higher prices). Of course, the higher domestic production could have been offset by much lower imported lamb product or by a lot of lamb being put into cold storage in anticipation of better times to come. Indeed, cold storage holdings grew in January, but so did imports. Lamb imports on a carcass weight basis were 5 percent larger than a year ago, mutton imports were 38 percent greater than 1999's, and combined imports were 17 percent above a year ago. After adjusting for the growth in cold storage, lamb disappearance (usage) in January 2000 was 0.6 percent smaller than a year ago.

A 0.6 percent decrease in disappearance is a stronger response to the higher price than would be expected. In recent years, with a 0.6 percent decrease in lamb consumption we would expect a 0.8 percent or slightly greater increase in price. So, price increases in early 2000 were less than "normal" at the wholesale



level. This may suggest an overall decrease in demand for lamb from the American perspective.

But the decrease in demand for lamb appears to have come from the international market. Exports of lamb and mutton in January 2000 were 34 percent below a year ago. Adjusting for the export change, domestic lamb disappearance was up 0.2 percent. That suggests that wholesale demand for lamb within the U.S. improved.

Another thing that is immediately evident is the fact that the higher cutout values did not feed down to the slaughter lamb prices. This may be due to expectations of a more plentiful lamb supply than were truly there (USDA's January 1 Sheep and Goat Report showed 8 percent more heavy weight market lambs). At the same time, the price of feeder lambs was much stronger than a year ago due to a combination of better feedlot profits, lower expected feeding costs, and diminishing supplies of lambs.

A 6 percent year-to-year increase in lamb cutout values at the same time there is a 15 percent year-to-year decrease in lamb and mutton production might suggest a decline in demand any other time of the year. But in March, demand for lamb is greatly affected by the timing of Easter. And Easter 2000 will be on April 23rd, three weeks later than Easter 1999 and the latest Easter in at least 20 years.

So, a great deal of the early 2000 year-to-year decline in lamb production was due to the fact that lamb slaughter in 1999 peaked for the year in March for the Easter holiday. With the late Easter in 2000, lamb production is not expected to peak for the year until April. This makes year-to-year comparisons of the March and April lamb production and prices tenuous at best. If April production is below last year and prices are at or below last year, there will be little doubt that lamb demand has taken a drastic downward move in the early part of 2000. On the other hand, if April lamb prices are well above a year ago with similar or larger production than 1999's, there is a possibility that the increased demand for red meats has spilled over into lamb.



## **Situation and Prospects**

Volatility continues to be the norm for the sheep industry. The first two months of 2000 were ideal examples. Feeder lamb prices (4-market average) dropped from around \$87 in December 1999 to \$82 by the last week of January. It only took four weeks from that point for feeders to jump up to \$92. Slaughter lamb prices (3-market average) moved from \$75 in December 1999 to \$64 in late-January back up to \$75 in late-February. The light cutout value moved from \$202 in late December 1999 to \$179 in mid-February back to \$201 in late-February.

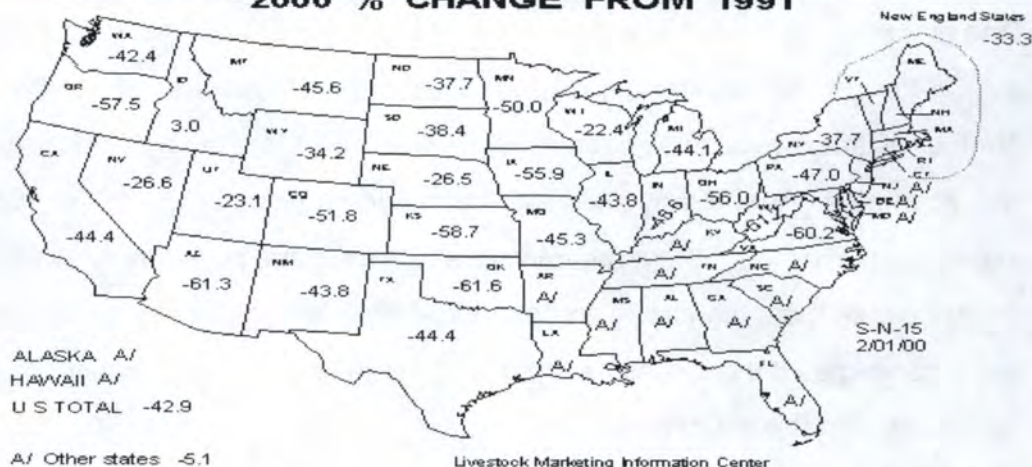
For the feeders, price movement was a function of the slaughter lamb price movement and expectations. February prices above December 1999 prices were a result of expectations for continued low feed prices (corn can still be delivered into feedlots below \$2.10 per bushel as of this writing) and higher prices for slaughter lambs when February placements reach their marketing window. Most lambs placed in late-February will go to slaughter during the late spring or even early summer months. Given price patterns over the last few years, slaughter lamb prices during that period should be higher than current levels.

Slaughter lamb prices held steady through March. If a normal seasonal trend holds this year slaughter lamb prices could move up another 15 to 20 percent in May-June to near \$90 before trending lower in late summer back toward the upper-\$70's. Slaughter lamb prices in 2000 may average 2 to 5 percent above 1999's.

Feeder lamb prices have recently been well above a year earlier (\$10 to \$20 per cwt.) and have been above the 5-year average. If the typical seasonal trend develops, feeder lamb prices could move 10 to 15 percent lower by June, from the recent \$100 per cwt. to the low or mid \$80's for the summer months. Still well into this summer, feeder lamb prices will likely remain above 1999's. As with feeder cattle, feeder lamb prices this fall will depend on feedstuff prices.



### BREEDING SHEEP - ONE YEAR & OLDER EWES 2000 % CHANGE FROM 1991



The domestic supply side provides a partial explanation about recent price movement. Commercial sheep and lamb slaughter declined seasonally from December 1999 into January. But compared to a year ago, December's commercial slaughter was up 0.2 percent while January's commercial slaughter was up 4.8 percent. As far as lamb and mutton production are concerned, heavier weights kept December's production 4.4 percent larger than a year ago while January's production was 5.6 percent larger than 1999's. As expected, prices were under additional pressure in January due to large year-to-year increases in production.

NASS estimated the number of lambs available for market weighing more than 105 pounds on January 1 as 8 percent above a year ago. Yet total lambs available for market was estimated 3 percent below a year ago. Through the end of March, year-to-date FI lamb & yearling slaughter was nearly 10 percent below 1999's. That is very reflective of the NASS estimate of total lambs available for market, but well below what the above 105 pound estimate would suggest slaughter should be. If NASS's estimate for 105 pound and heavier lambs was accurate, a short-term weight problem should have occurred. It may also mean

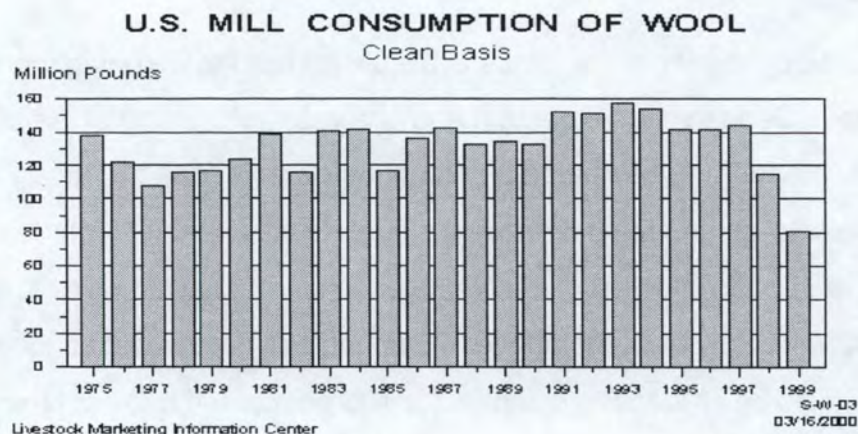


that the industry is trying very hard to ration an increasingly scarce product going into a period (Easter) when lamb demand is historically the strongest of the year.

One problem with projecting whether or not the summer price pattern will repeat itself in the coming months is the lack of frequent, accurate data about the number of lambs available. Currently, USDA-NASS turns out a biannual report with estimates. As with any estimate, information coming out is only as good as information going in. If there are concerns with the data, the industry must communicate those concerns and provide workable suggestions for correcting those concerns. If the industry wants an accurate estimate, the industry must cooperate with the estimators.

## Wool Situation

Shearing was well under way around the country in March. There were a number of reports of weather related stoppages. But, at the same time, producers were not interested in selling at the prices that were being offered. In fact, some warehouses were reporting that producers were not willing to commit wool for coring since current prices wouldn't cover even the shearing costs.

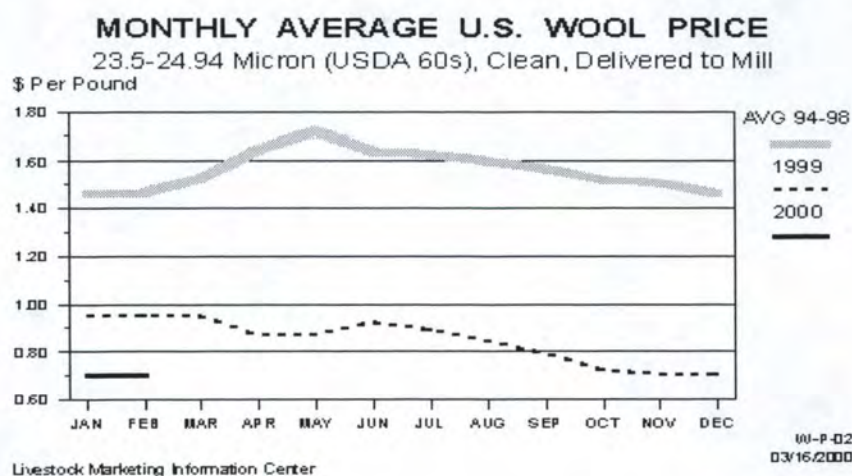


There is a widening price gap between fine (under 22 micron) and coarser wools.



With the reduction in numbers of finer wool sheep in the U.S. and the tightening world-wide supplies of fine wool, buyers are having to compete harder for those types of wool. But the highest price reported through the end of March was \$1.45 per pound clean for some 19 to 20.5 micron wool baled in film packs out of Texas. Wool coarser than 22 microns traded at prices under \$1.00 per pound, clean.

In the International market, Australia's Eastern Market Indicator continued to strengthen throughout March. By the end of March, the Eastern Market Indicator was trading 26 percent above a year ago and at the highest level since late 1998. But the exchange rate has moved against the U.S. market since January. Converted to a U.S. cents per pound basis, the March Eastern Market Indicator was slightly below this year's year-to-date high point (late January). But the Eastern Market Indicator for the week ending March 31st converted to U.S. cents per pound was still 21 percent above a year ago and posted the second highest weekly close behind the January 21st close since May 1998.



Late March strength in the Eastern Market Indicator was provided primarily from the finer wools. There also appears to be improving prices in the mid-micron



wools. Combining a currently strengthening world economy with the continued expectations of much tighter world wool supplies suggests continued modest improvement in wool prices throughout 2000.