WESTERN STATES HAY MARKET ANALYSIS AND INSIGHTS

Seth Hoyt[1]

Western Hay Market Outlook for 2011

OVERVIEW

As I write this hay market outlook we find ourselves in a bullish hay market situation in most areas of the West in the fall of 2010. While the hay supply picture has changed due to lower production and strong usage by dairies, it cannot be overemphasized how export demand has been a major factor in fewer supplies of alfalfa hay in the seven Western States in the fourth quarter of 2010. This was especially true in States like Idaho, Nevada, and Arizona. But even California saw strong export demand in the Southern California desert in 2010 aided by a new press in the press in the L.A. area. Currently there are two new hay presses going into the Imperial Valley, in fact one is up and running as of two weeks ago. Although dairies have returned to profitability in August through October 2010, it is an industry far from being healed financially. Higher grain and protein feed prices and strong hay markets combined with trying to deal with past debts have kept profit margins at dairies slimmer than they would normally be given where milk prices were in October. Additionally, the milk price outlook has taken on a negative view for December through the first half of 2011. As we look to where this train is moving in the next year, there are four factors that will have a major impact on hay supplies and prices – hay carryover, hay acres in 2011, milk prices, and hay exports. A fifth factor is supply of corn silage. The variables that impact hay markets have increased from 30 years ago which make it more difficult to predict hay prices. I will revise my predictions as necessary in the coming months and will include these updates in my weekly report. We have seen unprecedented events the past 30 months in the dairy and hay industries and we will go into uncharted territory again in 2011.

Hay Carryover - With overall disappointing alfalfa hay yields and production in the West this year combined with strong export demand, hay carryover into 2011 in the seven Western States will be down from a year ago. Initially, I thought California hay carryover would be down at least 25% to 30% given a 9% drop in alfalfa hay production, strong export demand, and heavy dairy usage. However, after further analysis, it may be off more like 15 to 20% because of the large volume of alfalfa hay shipped into CA this year. Alfalfa hay crossings into CA in 2010 will probably set a new record and my estimate is around 950,000 tons. There were heavy imports of alfalfa hay from Nevada and Utah.

Idaho hay carryover could be down 20 percent as a large amount of alfalfa hay moved to exporters in Washington along with late season demand from Idaho dairies and lower alfalfa hay production in 2010. Additionally, dairy cow numbers in Idaho are up 25,000 head from a year

---

[1] Seth Hoyt (aginfo@thehoytreport.com), THE HOYT REPORT, 3003 Grapevine Gulch Road, Ione, CA 95640. IN Proceedings, 2010 California Alfalfa & Forage Symposium and Corn/Cereal Silage Mini-Symposium, Visalia, CA, 1-2 December, 2010. UC Cooperative Extension, Plant Sciences Department, University of California, Davis, CA 95616. (See http://alfalfa.ucdavis.edu for this and other alfalfa symposium Proceedings)

ago and this along with more milk replacement heifers has increased hay consumption in 2010. Late year supplies of feeder hay in Idaho are very tight, quite different than what we saw the first half of 2010 and in 2009.

Estimating Washington hay stocks is a bit of a challenge. While the 20% more hay carried into 2010 was more than offset by a reduction in alfalfa hay yield and production this year, the challenge is estimating the amount of alfalfa hay in exporter hands. Baled hay exports from PNW ports in the second half of 2010 are down substantially compared to a year ago. Part of this has to do with available supplies to export as fourth cutting alfalfa hay in Washington was hammered with rain. As of this writing, fourth cutting rained on alfalfa hay was finding some demand from Idaho dairy hay buyers which is very unusual. But the other big factor for lower hay exports are ocean freight rates that are much more competitive from California ports compared to the PNW. I still believe hay stocks carried into 2011 in Washington will be down around 10% and would be down even more if it weren't for increased timothy supplies in some exporters hands compared to a year ago. Much of the increased hay carried into 2010 in WA was alfalfa, not timothy.

Nevada and Utah hay stocks should be down 15 to 20% due to lower alfalfa hay production and heavy alfalfa hay movement to CA dairy buyers and export buyers. However late rained on hay, particularly in Nevada may temper those numbers a little as rained on hay was moving slower in October. The amount of alfalfa hay exported into California from Nevada this year was impressive, up 61% from a year ago. Utah alfalfa shipments to CA were also up significantly at 42% more than 2009.

Arizona hay carryover will be influenced by estimated alfalfa hay production that was up 12% compared to 2009, according to USDA. However, due to very strong export demand and good interest from California dairy hay buyers, hay carryover in Arizona will probably be down a little but not a significant decline from a year ago. Additionally, dairy cow numbers in Arizona were up 15,000 head from a year ago which increased hay consumption.

Alfalfa Hay Acres – There are some interesting dynamics developing with alfalfa hay acres in the West in 2011. Due to the extended period of financial losses in the dairy industry and the lack of money to pay for hay, many hay growers have been looking for alternative crops and have hit a bonanza in 2011. Growers have more crop options than in many years with the three main crops being corn for grain, wheat, and cotton. Acres of all three of these crops will be higher in the West in 2011 and as a result, alfalfa hay acres will be down. Some States will see more of a decline in alfalfa hay acres than others. For example, in Nevada there are not many alternative crops for alfalfa hay growers. But they will be the beneficiary of lower alfalfa hay acres in California, Utah, Idaho, and Washington.

Estimating California alfalfa hay acres for 2011 is a challenge because of the low plantings last year, particularly in Central CA which is the largest alfalfa hay producing area in the State. As you know, drought was gripping CA in 2009, and this along with a depressed alfalfa hay market and dismal dairy situation, gave growers no incentive to expand alfalfa hay acres. In fact, acres were down 50,000 in 2010 compared to the previous year. As a result, alfalfa hay plantings in 2011 in some areas of Central CA will be close to 2010. However, with the very strong cotton, corn, and wheat markets in recent weeks and growing indications that milk prices will decline in the coming months, it is a sure bet that growers will re-think their planting strategies. I am already hearing that more alfalfa may come out and go into cotton in central California. I now believe alfalfa hay acres in CA in 2011 will be down, and could be down 5% rather than the 3% I was thinking a few weeks ago. A 5% decline would pull alfalfa acres in California below 900,000, something that hasn't happened in CA in a very long time. What is interesting about this is that while dairy cow numbers in CA are currently at 1,747,000 head, the smallest inventory since early 2005, alfalfa hay acres were 1,040,000 in 2005. If alfalfa hay acres in CA drop to around 880,000, that would be 160,000 less alfalfa hay acres with the same number of cows as we had in 2005. In 2007 when there were 990,000 alfalfa hay acres in CA with 1,790,000 dairy cows, had it not been for a record tying yield of 7.2 tons per acre that year, alfalfa hay prices in CA in 2007 would have been up even more than the 42% from 2006.

Alfalfa hay acres in Idaho in 2011 should be down from 2010, maybe a 5 to 10% decline, as I am hearing of more growers that will plant wheat and corn. Idaho had one of the toughest alfalfa hay markets in the seven Western States in 2010. This was a reflection of the very dire financial condition of dairies in the nation's third largest dairy State. But because of the depressed alfalfa hay market in Idaho, demand was strong for Idaho hay from buyers in other States, particularly Washington export buyers. This strengthened the alfalfa hay market in Idaho late in the season, particularly on feeder hay. While some believe that Idaho alfalfa hay acres may not be off that much in 2011 because of the improved prices late in the season, I believe the very strong corn for grain and wheat markets will pull alfalfa hay acres down in Idaho in 2011. Sources have been keeping me abreast of the wheat acres going in and alfalfa hay acres coming out in Idaho. As I mentioned earlier, dairy cow and milk replacement heifer numbers have gone up in Idaho the past year but the negative has been the tight amount of cash at dairies.

Alfalfa hay acres in Washington will be down 10 to 15 percent in 2011. There will be alternative crops even beyond corn and wheat that growers will plant and it appears that timothy hay acres will be up maybe 10 to 15 percent in 2011. Due to rain damaged second cutting timothy and quality problems with timothy hay in Canada due to rain, the timothy pipeline has still not been filled and demand for timothy is strong. Growers in Washington contracted corn for 2011 and after a very rough production year on alfalfa hay, some are more than happy to reduce alfalfa hay acres in 2011. There is also the uncertainty of the dairy situation and the volume of alfalfa hay that will be exported from Washington compared to past years. California ports have a huge freight advantage over the PNW and some Washington exporters are positioning themselves in California and other Western States to ship more hay from California ports. While this will impact alfalfa hay shipments from the PNW, the jury is still out whether alfalfa hay volume from the PNW will continue to shift to California ports long term like we've seen in 2010.

Alfalfa hay acres in Utah should be down in 2011, around 5% or possibly more as some growers contracted wheat for next year at attractive prices. 2010 was a challenging year for Utah hay growers as well and similar to Idaho, the dairies did not have much money even when milk prices were profitable in late summer and early fall. Some Utah dairies were still trying to make payment deals on hay they were purchasing in September and October. The lack of money in the dairy industry and uncertainty what the financial condition of the dairy industry will be in 2011 will push more hay acres into other crops, not only in Utah, but throughout the West. The dairy industry in the West is still the biggest buyer of alfalfa hay.

Nevada alfalfa hay acres will not change much because they have very few options on alternative crops. There is a chance that acres in Nevada could even be up a little if drought conditions such as in Lovelock and central Nevada subside due to heavier rain/snow this winter. While sales to exporters were up in 2010, the Nevada alfalfa hay industry is still heavily dependent on the California dairy industry. There is a chance that Nevada alfalfa hay growers may be in a better position in the early hay season in 2011 than California because their first cutting in June will come off about the time when milk prices are projected to start improving. Obviously, much can change in the months ahead.

It appears that the strong cotton market will reduce alfalfa hay acres in Arizona in 2011. Some growers contracted acala cotton for 2011 at 90 cents a pound and more will contract after the recent upturn in cotton prices. It is hard to say how much of a drop we will see in alfalfa hay acres in Arizona but it could be down 5% or more. Arizona alfalfa hay growers had a tough hay market through most of 2010 and their late market was still lagging behind most Western States. The strong cotton market will enable growers to return to a profitable position and will give those in the south central area a way to limit their exposure to the dairy industry. Arizona dairies kept downward pressure on the hay market much of this past season.

Milk Prices - When looking at what milk prices may do let me be clear that I am not an expert on milk prices and I rely a lot on reports and the opinion of others. I don't need to tell you how big of an impact milk prices and profitability in the dairy industry have on the hay industry. While higher grain prices and paying toward past debts have tightened margins for many dairy producers in the West, the increased money to buy hay has been a positive for the hay market in recent months. What we learned from late 2008 and 2009 is that without profitability and the normal flow of money in the dairy industry, there is breakdown in the hay marketing system. Additionally, as more dairies are forced to buy hay short term (hand-to-mouth) it puts downward pressure on the hay market as supplies do not clear as fast from growers hands.

While the milk futures market is not always the best indicator of what future milk prices will be, it is one tool that I use to get a glimpse of what might happen in the coming year. Obviously there are other factors such as milk production, dairy product inventories and prices, dairy exports, and the U.S. economy that impact where milk prices are going. In the past three weeks we have seen cheese prices drop 29 cents a pound. Since early summer, U.S. milk production has been increasing with June up 2.7 percent to a 3.6 percent increase in September. Cheese production has also been growing with September production up 4.3% from a year ago. While U.S. cheese exports are up significantly from last year, we have seen a recent slowdown in domestic demand. We'll see if the normal holiday demand for cheese and butter is strong enough to reverse this recent downtrend in cheese and butter prices. If not, we are looking at overbase milk prices in CA possibly dropping to the $13 to $13.50 range in the coming months. This would push quite a few dairies into a negative cash flow position as milk cost of production for many dairies has bumped up to the high $13 to over $14 cwt. level due to higher grain, hay, and other feed costs. This would also put a death nail on a percentage of dairies in CA and the West that are in fragile financial condition and needed stronger milk prices in 2011 in order to survive. Unless something changes, these lower milk prices could begin as soon as December 2010.

Another factor that will impact dairy product exports could be the $600 billion stimulus package announced this past week from the Federal Reserve. While there is fear of inflation in the U.S. because of this infusion of money into the U.S. economy, a weaker U.S. dollar will help dairy product and other agricultural commodity exports, including hay exports.

Hay Exports - It appears that West Coast hay exports will be strong in 2011. If the U.S. dollar continues at a weak level this will give Western State exporters an advantage over competitors such as Australia and Canada, and Spain in the UAE market. Because of unfavorable exchange rates, competitors will have to raise their prices going into Japan and other markets. While this appears to be a boom for Western U.S. hay exporters, they will have supply issues to deal with next year that may not allow them to be significantly below the competition in price. Alfalfa hay production will be down in the West in 2011. However, if the alfalfa hay market softens a little due to lower milk prices this will benefit exporters. We may see export demand be a stronger force in the alfalfa hay market in some areas of the West, even more than we saw in 2010. While dairies have always been the driving force in the alfalfa hay market in the West, lower hay supplies combined with strong export demand could keep the market higher than one would expect if the milk price falls into the $13 to $13.50 cwt. range.

All indications are that West Coast alfalfa hay exports to China will continue to increase in 2011. We should see strong hay exports to the UAE and we could see increases to our other export markets, including Japan if our price on export hay is lower than our competitors. We should see more alfalfa exports to Saudi Arabia but this market will be slow to develop. Any change in exchange rates or hay markets overseas could change our competitive position.

ALFALFA HAY MARKETS IN 2011

There is a stark difference in the hay supply picture between 2011 and 2009. In the West we will carry much less hay into 2011 than we did in 2009, possibly 15 to 20% less. This combined with less alfalfa hay acres and production will make things very different. Another interesting thing is that we will go into 2011 with more dairy cows (24,000 more as of September 2010) in the six Western States (AZ,CA,ID,WA,OR,UT) than we had the previous year. A 22,000 head drop in CA is more than offset by increases in other States. After all the herd retirement programs and periods of increased cow slaughter we will have more dairy cows on hand in the West next year than we had in 2009.

I have mentioned before that trying to predict alfalfa hay prices in the West when we are looking at dairies possibly going into a negative cash flow situation is like throwing darts at the board. While hay supply/demand doesn’t work as it should when dairies are losing money, the difference this time is the substantially lower hay supplies we are looking at in 2011.

In California, I believe the two first cuttings of new crop supreme will deliver to Tulare for around $200 to $215, down from the most recent prices of $210 to $230 delivered. Dairies will try to break the market back even further than that but I believe between lower hay supplies and export demand they will have a challenge doing that. We shall see. This would put the early new crop Supreme alfalfa hay in the Imperial Valley at around $150 to $160 fob. This will put Supreme alfalfa hay in central CA between $175 and $190 fob. If milk prices were to improve to $16 cwt. or higher, the Supreme alfalfa hay market could move up $20 or more than these prices. I really believe supplies are going to be off that much. If milk prices fall harder than anticipated dairies will try to bear down harder on hay prices. Again, I believe lower hay supplies and export demand will keep the alfalfa hay market on a different plateau than we saw in 2009 and early 2010. If milk prices strengthen the second half of 2011 the alfalfa hay market will move higher as the increased money that will flow from dairies will be chasing smaller hay supplies.

In Washington, I believe top milk cow and export alfalfa hay big bales will be in the $150 to $160 fob range. While alfalfa hay supplies will be down in Washington next year, the true test in this market is how high exporters are willing to push the market on Premium export alfalfa hay given the higher costs of exporting hay from the PNW. They continue to face stiff competition from exporters shipping from California ports. A weak dollar would help them compete with overseas competitors but they still have to compete with California exporters. While dairies in Washington will need quality alfalfa when 2011 new crop begins, what they are willing to pay will be influenced by milk prices, profitability, and export bids. If milk prices are better than anticipated at first cutting and dairies are profitable, they will be more competitive in the alfalfa hay market and could push prices higher than my prediction.

In Idaho, a downturn in milk prices and profitability will have a bigger impact on the alfalfa hay market than many other Western States. We saw this during the negative cash flow in the first half of the 2010 season and I don't know why it would change. There is a chance milk prices could be in a recovery mode by June 2011 and this would obviously be much better for the Idaho hay market than if dairies are negative cash flow. Predicting Idaho hay prices is more of a challenge for me than other Western States but I believe Supreme alfalfa hay prices will be in the $140 to $150 fob range unless milk prices are still below cost of production which could pull prices lower. A milk price above $16 could pull prices above these levels.

Nevada alfalfa fob hay prices will reflect the delivered prices to Turlock and Tulare, CA. If milk prices are higher by June when first cutting comes off this will be a positive for Nevada alfalfa hay growers. My prediction for Nevada alfalfa hay prices will be based on delivered prices on Supreme alfalfa hay to Tulare of $200 to $215. This will put Supreme alfalfa hay fob prices in central and northern Nevada around $150 to $160 fob with Western Nevada a little higher.

Utah alfalfa hay prices could be in wide range as local dairies want to pay less than California and export buyers. Supreme alfalfa hay prices in Utah will be in the 140 to $150 range as California dairies will be in need of quality alfalfa hay to blend with middle quality summer hay. This price is based on availability and continued competitive dry van freight rates. There will be more demand for Premium export alfalfa hay in Utah and that market will be a little below top milk cow hay.

Another tough hay market to predict is in Arizona. If milk prices are at negative cash flow levels, Arizona dairies will be very bearish on alfalfa hay prices as they were in 2010. The difference in 2011 is that there will be less hay. Additionally, with strong retail and export demand combined with demand from California dairy hay buyers, Arizona dairies may have to pay more than they want for hay. Supreme alfalfa hay prices will be around $140 to $150 fob in Parker/Poston and possibly a little lower closer to Phoenix dairies.

If corn prices continue to strengthen, dairies may reduce corn in milk cow rations which will hold pounds of alfalfa hay at levels higher than one would expect. That is why my predictions on prices may seem high if milk prices fall to the $13 to $13.50 level or lower. If you are a grower and think that lower hay supplies will push prices higher than my predictions, what we learned in 2009 is that when dairies have limited money to buy hay it has a big impact on hay markets. If you are a dairymen and think I've fallen off a turnip truck on my head and that prices will not be that high, I believe hay supplies will be low enough in 2011 to keep the market from dropping substantially. Based on dairy cow numbers there will not be an abundance of hay.

Retail Hay – We have seen strong demand in some areas of the West for retail hay in the fall of 2010. It's hard to say where prices will top this winter; some believe Premium retail alfalfa will reach $190 to $200 per ton on barn hay in the central and northern CA valley. There will be resistance as prices continue to climb. The economy is still not very good and people only have so much money to spend on feed. Demand for #2 retail hay may improve as retail horse buyers try to save money. Retail alfalfa and grass hay prices will remain strong through the winter. The very strong market on timothy and orchardgrass hay will ease as we get into new crop but the market could still be at historical strong prices due to about the same production in the grass producing areas of California and Nevada.

CORN SILAGE

Dairies in central CA were increasing the amount of corn silage in rations in 2007 and 2008 but that trend reversed in 2009 and 2010 due to a decline in corn for silage acres. With the very strong corn for grain market this late summer and fall, some corn that was slated for silage in 2010 was diverted to the grain corn market. Many dairies in central CA were forced to pay $35 standing for corn silage or growers said they would harvest it for grain corn. With some central CA growers contracting grain corn for 2011 in the $180 to $200 per ton range, I have heard growers have said if they can't get dairymen to contract 2011 corn silage for a least $40 standing, they will contract their corn for the grain market. While I have heard this talk, I have not confirmed $40 contracts for corn silage for $2011. The bottom line is that this puts dairymen in a tough position because growers have a strong corn for grain market as an option. This will increase the amount of corn for silage planted by dairies but this will not make up for all of the corn for silage acres that are normally grown by farmers each year in CA for the dairy market.

After corn silage acres in CA dropped to 385,000 in 2009, a 22% drop from 2008, the major choppers in central CA say acres were off again this year. The estimates are from 10 to 15% lower. The scary thing is that choppers say acres will be down another 10 to 20% again in 2011. This will push corn silage acres to near 300,000 after being 495,000 in 2008. If this holds true, it will be significant! Dairy cow numbers in CA have dropped around 100,000 head or 5% since early 2008 but corn silage acres projected for 2011 would be around 35 to 40% lower than 2008. However, this does not take into account the additional corn for silage acres that may be planted by dairies. We'll see how this develops.

CONCLUSION

Alfalfa hay acres will be down around 5 to 10% in the seven Western States in 2011. Lower milk prices the first half of 2011 will hold new crop Supreme alfalfa hay prices down a little from the fall 2010 market in many areas but would be up from prices from earlier in 2010. Were it not for lower hay and corn silage supplies and anticipated strong export demand, the alfalfa hay market would be down even further the first half of 2011. What appeared to be a recovery in the dairy industry in late summer and early fall of 2010 has deteriorated and the outlook now is for milk prices below cost of production in the coming months. This will reduce alfalfa hay acres even further as growers plant alternative crops in the late winter and spring of 2011 to limit their exposure to the dairy industry.

Seth Hoyt is a hay market analyst and author of **The Hoyt Report** issued weekly, 3003 Grapevine Gulch Road, Ione CA 95640 aginfo@thehoytreport.com www.thehoytreport.com