## In the Markets: Cattle Inventory

## Season 1, Episode 11

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**Adele Harty:** Welcome to Cattle HQ brought to you by South Dakota State University Extension. I'm Adele Harty, Cow/Calf Field Specialist based out of Rapid City. Today's episode is our quarterly update “In the Markets” conversation with Matt Diersen, SDSU Extension Risk and Business Management Specialist from the SDSU campus in Brookings. The timing for this podcast is important, as the recent release of the cattle inventory report gives us quite a bit to talk about in regard to our cattle inventory numbers and what we might expect in regard to those prices moving forward into 2022. So Matt, thanks for joining me today. We're going to go ahead and jump right in and talk about that cattle inventory report that came out on January 31. What did this report tell us about cattle inventory from a national perspective?

**Matthew Diersen:** Well, it is that national perspective. It's the overview of all the inventories across different classes of cattle, so it gives you a point in time look at the total cattle numbers and the number of beef cows, calf crop size and gives you details down at the state level as well. At the national level, it was a little bit of a surprise to the trade or the market because the overall inventory was a bigger decline than expected so there's fewer cattle out there than everybody was thinking and it's, not by a lot, but anytime you have a little bit of a surprise for the market, prices in general respond a little bit.

**Adele Harty:** So is there concern that that trend of declining numbers may continue due to some of the expanding drought conditions that we've heard about across the country with more producers, having to liquidate higher numbers and maybe what impact might that have if it does?

**Matthew Diersen:** I'd say the result of that looks to be a little bit mixed at this point. There were declines in total inventories scattered throughout the United States when you look at year over year so you kind of want to be conscious of that. I'd say the bigger pressure has been on the beef cow numbers and the beef cow inventories and that shows up in the South Dakota data, as well that cow numbers are down and that's what is going to trigger a smaller calf crop, of course, this next year and are those other categories also supporting or pointing to sort of broader liquidation or reductions in numbers? Yes, a little bit. You see the number of replacement cows, beef replacements a little bit lower on both those that are expected to calve this year and the other heifers held for replacements. So the multiple indicators are for a slightly smaller calf crop this year, next year and the year after.

**Adele Harty:** So I'm sure that's going to impact our prices as we move forward, we'll get into that in just a minute, but you talked a little bit about South Dakota beef cow numbers being lower. What do some of the other South Dakota numbers look like since that's where we're at and maybe some of our listeners want to learn more about what South Dakota picture looks like?

**Matthew Diersen:** For South Dakota the overall cattle inventory number was down about 200,000 head compared to a year earlier, and the majority of that shows up in the reduction in beef cow numbers. So lower beef cow numbers are driving lower total inventory and you want to keep that in perspective. It's not like there's a large number of really lightweight calves in the inventory at the state level on January 1 so there's different categories that do come into play, but that beef cow number is the main one that had a significant change or you know sort of shows up on a chart as being large compared to most of the other categories so fewer beef cows. That's consistent with the dry conditions and the feed production challenges across the state and I'd say that was muted a little bit in South Dakota and in some of our neighboring states because there’s still availability of corn and feed, corn for silage and such, so you actually saw a slight increase in numbers from our neighbors to the east; Iowa, Minnesota had cattle inventories a little bit higher. So it's very much South Dakota sitting in a transition point when you look around the country. And then the other categories, very little change in terms of like number of replacements or feeder cattle outside of feedlots specific to South Dakota. Those numbers are fairly stable and consistent. In the last category that you only get a snapshot look at in the annual inventory report are the smaller feedlots so the cattle on feed inventory in South Dakota was down but that's driven mainly by the large feedlots. The cattle on feed in the smaller feed lots that total or the number there has stayed fairly constant over the last few years. So the smaller feedlots have access to feed, are growing animals compared to what looked like a reduction among the larger feed lots.

**Adele Harty:** So cow numbers down, everything else is pretty stable at the state level. So let's move into prices. I've heard some different price outlook projections, and the exciting news for livestock producers is that those projections are positive, the ones that i've seen it with prices moving higher and we've already seen some of that this winter in comparison to our fall prices, last October, November. So, can you tell me a little bit more about what some of those projections look like and what some of those organizations that follow that are talking about as we move through 22 and maybe even into 23?

**Matthew Diersen:** Right. The answer kind of depends on what class or type of cattle you're talking about and when. The price levels have already exceeded some of the early projections or forecasts, especially for the beginning of 2022, but in general, I look at a few different sources. Let's start with the USDA baseline, which is going to be in the news throughout the month of February where the USDA comes out with their 10 year price projections. Just looking at the impact that the cattle inventory report that was recently released that really kind of confirmed that the inventories or number of calves available, the next few years is expected to be continuing to decline slightly. Lowering the supply generally leads to a higher price. So the USDA for calves, they've got the value approaching $2 next year, the year after, the year after. So approaching that. Now we've already seen some five to six weight steers sell for about $2 this winter, but the general trend is for better prices to be expected this year, next year, the year after for calves.

**Adele Harty:** What's the reference weight on that $2 price point?

**Matthew Diersen:** For the USDA it would be all calves weighing less than 500 pounds.

**Adele Harty:** Okay.

**Matt Diersen:** Just a NASS average but that number correlates very, very well with five to six weight calves sold in South Dakota. Okay, so to me I look at it as a fairly good benchmark for where, in general, you could expect prices to go and they're saying higher, or at least substantially higher than the last two years. For other prices, we can look at the World Ag Supply and Demand Estimates or the Economic Research Service estimates. They have fed cattle for the year in the $137 area and feeder cattle in the $160 area, both of which would be substantially higher than the last couple of years, just to give you an idea. And the LMIC Livestock Marketing Information Center, their model released shortly before the cattle inventory report numbers, so all these are subject to a little bit of revision, but they had fed cattle in the $133 area for the year and feeders in the $164 area so both would be reflecting substantial increase from the prices received during 2021. So that bodes well, that's good news and the expectation for 2023 is higher for both those series as well. So what does that mean locally? We would expect that calf prices in South Dakota in fall of 2022 would be substantially higher than they were in the fall of 2021 and most producers were pleased at least with the direction and the prices received in the latter part of 2021.

**Adele Harty:** Right, I would agree with that, as a producer myself, we definitely saw some increase later on in the fall with those prices and that was definitely positive for us and looking forward to what we might see in prices, as we move into 2022 and beyond. So one of the key factors, especially with the cattle that we sell in South Dakota is normally, we have a very positive basis, which is good for us in regard to the cash price received in comparison to those future prices, but what have we seen with basis in 21 and maybe what might that look like so far in 22 and maybe even moving forward into the fall?

**Matthew Diersen:** Let's maybe back up just a little bit and clearly define basis, just so everybody's on the same page. So basis would be the cash price minus a futures price and generally we're talking about a nearby futures price for comparison's sake. And then at SDSU, we track the basis levels. I usually put out a five year track record of monthly basis levels on live cattle, feeder cattle, and calves, so that's what I'll be referring to here. So if we start with live cattle, nothing major stands out when I look back at the pattern, or what basis did during 2021. Lacking any other rationale or anything, I think using a five year average for the last five years as an average would be a pretty good benchmark to use for live cattle going forward, especially for say you know throughout 2022 just use a five year average, average of the last five years. For feeder cattle it's a little different because we look at last year and I can either look at a table or make a chart of this. You might say, “Oh that basis looked awful for feeder cattle” and by feeders I'm talking seven to nine weight steers last year. So in 2021 the basis seemed low or not as high as you you'd expect. So typical would be like $5 or a cash price for an eight weight versus the futures would generally be $5. It was more like $1 to $2 all year. Well I think what was happening pretty much throughout the year was the cash price was having to chase the futures, or it was saying well here's the cash price now, but the trade was expecting the price in the future to be higher and that sort of consistently happened so as the futures price increased all year, cash was trailing or following the futures. So for 2022 I think I'd revert back to again probably using a five year average on feeders, just to get a benchmark for planning prices and planning purposes for the year.

**Adele Harty:** That makes a lot of sense and I appreciate having those resources at SDSU that producers can go and look at and kind of understand what those basis numbers have been historically and be able to look into that in the future.

**Matthew Diersen:** The other basis figure would be the basis on calves. For calves I use a 500 to 600 pounds steer price reported through the AMS reported sale barns for South Dakota. That basis last year was fairly typical. It was actually probably a little bit narrower than expected, but not than expected, because the basis was constrained on those calves by the high cost for feed. So the high cost of corn, the high cost of hay kept that basis from getting any wider on calves so five weight versus a feeder cattle futures price, there is a big weight difference there. And if you look ahead to 2022 for basis, so I want to know what I'm getting for my calves or could expect for calves this fall, you can look at the feeder cattle futures and then say, well, we need to add $20, $30 to that. Where are you going to get that number? It's probably going to be a little bit better, or I’d expect it to be a little bit better of a basis than last year's basis because, by the time November rolls around I would think you'd have downward pressure on corn and hay prices, which would widen the basis out for those calves, but probably not until the second half of the year.

**Adele Harty:** Something good for producers to keep in mind and be watching those futures prices, as well as checking out that basis publication, that you have or are updating and will have available soon. So as we talk about futures, what are we currently seeing there, what's that looking like?

**Matthew Diersen:** Yeah it's kind of kind of exciting to see price levels for most meats are higher and that's showing up on the futures side of things. The cash prices are good, the futures prices are saying that this is expected to continue. So if you start with the price series closest to the consumer, that's going to be the live cattle futures price, so the future value for slaughter cattle. Looking at both the June and December futures prices they're trading near or above or at record levels for this time of year. So let me explain that again. So sitting here in February prices are at high levels on the board or on the futures market for cattle to be ready for market in June and December, so that's good,that’s good news and it suggests trying to do something for price protection or risk management when prices are high or attractive. Now that doesn't say profit is absolutely there because you've got very high feeder cattle and very high feed costs going into that picture.

**Adele Harty:** So as you talk about risk management options, one that I've used myself is the LRP or Livestock Risk Protection insurance and it definitely provides me peace of mind, because I can look at those options and how many weeks out are available and what the price protection is and compare that to my breakeven so I can essentially lock in my price based on my breakeven because I've taken the time to calculate that and I think that's a key for everybody. And sometimes I get a check, it pays, sometimes I pay my premium. I mean that's what an insurance product is. But in the long run, I see that it evens out and it just decreases that risk and decreases my stress level, which I think is important. What other tools or where can producers go to find more information about what risk management options are available and learn how to use them if they're not aware?

**Matthew Diersen:** Yeah, that was like three questions in one. Alright, I'm going to back up just a little bit. What we've seen since the latter part of 2021 was a very attractive futures price on feeder cattle, so if we if we think about November feeder cattle futures that's the markets expectation of what a seven to nine weight steer’s going to be worth in the open market, or in the cash market, expect that in November. So that price series has been increasing steadily since that contract started being listed, that too, like the live cattle contracts is sitting very, very close to its all-time high. It's not quite the level it was at in 2014-2015, but it's getting close. That gives you, probably as a cow/calf producer, a fairly profitable level. You'd need a really high breakeven to make that not pencil out, or really high feed costs or something for that to not be attractive to look at. So what can you do when you see high prices available? Well high prices are one thing, but you want to say what's the cost to lay off that high price? And here's some good news, or more good news, so you have a high price level, you also have low volatility in the market and it's not that prices haven't been fluctuating recently, that's realized volatility. The volatility I'm talking about is the volatility priced into futures, options and other instruments like Livestock Risk Protection. That volatility is has remained low on both fat cattle and feeder cattle. So the cost of laying off risk is low right now, and the price levels are high, that's good news and good news. What do you do? You've got a couple of alternatives. High price levels, you may just want to lock in things using futures. You’d need to deal with a commodity broker to do that. It's probably too early, this time of year to do much forward contracting, let’s say calves or feeders or yearlings coming off grass, it's early. That would be an option or an alternative later on. The other two things to do or look at, especially because volatility is low, one would be to look at options. This would be for the seller, you can look at put options on feeder cattle feeder cattle options as a way to establish a floor price for your calf crop. For that to you’d need to work with a commodity broker or start a relationship working with a commodity broker to learn about those things and implement them that way. Another alternative is to look at Livestock Risk Protection, that's an insurance product that protects against the price level for cattle declining. There you'd be dealing with crop insurance or livestock insurance agent, they just call themselves insurance agents, but could very well be with a crop insurance company and they would work with you to get Livestock Risk Protection insurance in place and that product right now has a very large subsidy on the premium. So Livestock Risk Protection or LRP is cost effective relative to buying put options. Can be a little bit less flexible at times, but it has a very large cost advantage right now. Now the overall cost is fairly low in the market because of volatility is low, but using something like LRP makes it that much more attractive to get some protection in place and still have the upside open, if the markets move higher from where they've been.

**Adele Harty:** That's what I like about those options for sure is the upside still there.

**Matthew Diersen:** It wouldn't cost much today to lay off a lot of risk and still have the upside open, because I think you have to be a little bit optimistic about the direction that cattle prices are headed, especially if you're talking about calves to be sold in the latter half of 2022.

**Adele Harty:** So when you talk about forward contracting, options, and LRP, are there any restrictions to weight or number of head that you need to be able to utilize those products?

**Matthew Diersen:** Mainly, you need to just be conscious of the differences across the different types and products. So most forward contract arrangements are per head, so you're saying we're going to sell 30 head or 50 head or 200 head. So those are usually done on a per head basis. The contracts, futures and options contracts, are fixed in terms of size, so a feeder cattle futures contract or a feeder cattle options contract just says your underlying product is 50,000 pounds of feeder cattle. And it's fairly generic but that would be 90 calves, if you think about a 550 pound calf. So that that matters to just be conscious of that and then LRP is also on a per head basis. I was visiting with some folks the other day, and it was a partnership arrangement, one of the partners only had 20 cows. Well they would only want to be insuring 20 calves. You can do something like that with LRP and it doesn't become cost effective to buy a put option on 100 calves, when you only have the risk for 20 calves. So LRP’s got a cost advantage that way as well.

**Adele Harty:** That's what I've really appreciated about LRP, because I'm a small producer and it allows me to manage that risk on a smaller number of head of cattle, without having to do a put option or something like that on cattle that I don't have.

**Matthew Diersen:** Yes, nice cost advantage. LRP is also good for someone just trying to figure it out for the first time. You can't make as many mistakes, as you can using futures and some of the options situations that you can explore get yourself into. Hopefully, a good commodity broker would keep you out of trouble with futures and options, but it can be more complicated than Livestock Risk Protection.

**Adele Harty:** I agree. I think there's a little bigger learning curve for that then for the LRP. I do you have any resources on the SDSU Extension website on LRP and puts or options that we can refer listeners to?

**Matthew Diersen:** At the moment, probably not. There is some LRP stuff. There's a whole module like this on LRP as part of BeefUp. If you want to cross reference, if that would be done by then. If that would be something to drive traffic to that. The prices and basis charts and tables should be up sooner rather than later. The only other price thing, before you ask I'll just interrupt you and say “here's one more thing”. Throughout the price discussion one category or class of animals we didn't talk about relevant to the cow/calf producer, especially has been the value of cull cows or cull animals. That can be a large source of revenue and just something that people need to be conscious about. There has been a widening of the price spread, the discount if you would for call animals has not kept pace with the value of slaughter steers and heifers, so that's just something to be to be conscious of. The premium is out there for the higher quality carcasses and stuff, which allows the beef to move into various channels in the marketplace, whereas the cull cow is going to primarily supply the hamburger market. You're seeing higher values for slaughter animals in general, but good quality stuff that can hit export markets, restaurant markets that's commanding a premium relative to the cull cow side of things so that's not a projection per se for what's going to happen throughout the year, but that cull value hasn't kept up with the futures market right now, for example**.**

**Adele Harty:** I'm glad you brought that up because that does equate to a significant percentage of that beef cattle producer’s annual income, and I think a lot of times, it becomes an afterthought, and not really thinking about what those cull cow prices are doing.

**Matthew Diersen:** It's another confirmation of a reduction in the cowherd. You've had cull animals going to market and maybe some that weren't predestined for the market, aged out or something. So you've had cull animals supplied to the market and that's not necessarily what's been demanded, so that price has been pushed down which is just it's nothing to really plan for but just something to be conscious of so.

**Adele Harty:** But as we look at drought conditions and like we talked at the beginning, if that drought continues to expand.

**Matthew Diersen:** Cull animals hit the market they're not going to command the premium price, so if you could do something to source some feed or move them around or something to retain the ownership of those and supply a calf to the market come fall, that's probably going to be rewarded, and that would have implications all spring for the bred cow market for the next few months. On the expected value of the calf, that will be supportive and might mean it makes sense to do something to maintain ownership of bred cows or animals that might still be able to go into that marketplace, rather than just running a cull to a terminal market.

**Adele Harty:** The message is, there's some different things going on fundamentally. Drought conditions, markets can continue to change and drive these prices in different directions and as we look at those cull cows, with the law of supply and demand and the current conditions, it's going to be really important to really pencil out what's going to be the best option for those cows. Because if feed prices continue to stay high, trying to keep them or move them to where we have feed resources may not be as beneficial as moving them down the road. Each producer’s, going to be different.

**Matt Diersen:** Yeah

**Adele Harty:** But I think because of the potential we have in the calf prices, I think what you're saying is really good, but each producer’s going to have to calculate that on their own situation too.

**Matthew Diersen:** And maybe the take home message would be that given the widening spread between slaughter values for steers and heifers versus the market for cull animals you want to be deliberate with any bred cow or open cow over the next six months. So the bred cow, if you’re deliberate, you need to liquidate or sell it, you know get some lead time look East perhaps for a market, rather than surprise the market by bringing some cull animals at the last minute to a sale location. That's probably how it's going to not work out in your favor. Be deliberate about managing anything bred that you need to sell and just giving some lead time or maybe being a little bit flexible if you can with anything open that you need to sell as well.

**Adele Harty:** And try not to hit the cull cow market the same time everybody else is.

**Matthew Diersen:** Yeah and that's probably what happened. There wouldn't have been many choices in the fall, but if you held on to anything to this point, then you're looking at what's the next six months or what's the remaining feed supply look like and whatnot.

**Adele Harty:** Well, this has been Cattle HQ, brought to you by SDSU Extension, headquarters for all things beef cattle. Visit extension.sdstat.edu for the latest beef cattle information. Thanks for joining us today, and good luck with marketing your calves in 2022.

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