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BEGIN TRANSCRIPTION

00;00;16;27 - 00;00;45;13
Unknown
Welcome to Pasture to Profit. My name's Scott Stinnett, CSU extension agent here in Kit Carson County, Colorado, in the Burlington, Colorado office. And again with my co-host and colleague, Mr. Travis Taylor from the Yuma County office in Wray, Colorado. And Travis, today we're going to talk about cow nutrition throughout the production cycle and how we need as producers to focus on that and when to focus on it in the timing of that throughout the year.

00;00;45;13 - 00;01;10;11
Unknown
So let's just start with the general thoughts. What's the cows nutritional needs through her production cycle? Yes. Scott. So I mean, I think it gets back there and we always tend to worry about it. And we're always worrying a little late in our production cycle. So, you know, when we talk about cow nutrition, we really talk a lot about energy and protein requirement in the beef cow.

00;01;10;14 - 00;01;38;21
Unknown
And that can fluctuate depending on what her stage of production is. And it definitely fluctuates in this Colorado semi-arid environment where we have drastic changes in the weather that we have and the amount of forage that actually gets produced in in Colorado. So when we look at those things, there's some things to keep in mind. And usually when we start talking about the cow production cycle starts accounting.

00;01;38;24 - 00;02;00;25
Unknown
She's got to have a cast. She's going to be a beef cow at that time. About 60 days later to 80 days later, we hit peak lactation. That's when her requirements are going to be the highest she's producing. She just had a calf. She's trying to recover. She's producing the most milk, which is a high energy output for her.

00;02;00;27 - 00;02;29;09
Unknown

And then after that 70 days is that chaos starts to take in some forage of their own and go on down the line past 180 days. It's just a steady decline in that till winning time, which is when we're drying her up. She's got this really low need for energy. Usually if you're a spring calving operation here in the high Plains, your grass is drying off.

00;02;29;09 - 00;02;55;17
Unknown
So that's maybe when we see some protein supplementation. And then through that last trimester she's picks that energy need backup producing another offspring as we go forward. So we see this calving start to a high peak lactation to a low it weaning and then starts to build back up until we hit that peak lactation again in the next calving cycle.

00;02;55;17 - 00;03;16;07
Unknown
So that's kind of the ebb and flow with our nutritional program. I think what we tend to do is we focus a lot when that baby calves on the ground and she's nursing it and how that cow is, and we focus a lot on that baby calf when it comes winning time and what that calf is going away.

00;03;16;10 - 00;03;43;16
Unknown
And we're worried about getting that calf marketed. And two times when maybe we're reversed in what we need to be thinking about in our county and what that cow in nutritionally needs to be in a different body condition score at those times. Yeah, it's really easy to focus on the product, which is the calf that you're going to sell, and not necessarily the production engine, which is the cow themselves.

00;03;43;18 - 00;04;10;14
Unknown
And so yes, that ebb and flow that up and down, it's it is a cycle for sure. On production in a cow. Their nutrition. How does that line up though with forage availability and forage quality that we have. Well, I think it's vastly different. Last year in our area in eastern Colorado that springtime, we had some moisture, we had some grass, we had some high quality forage and some abundance of it.

00;04;10;19 - 00;04;36;06
Unknown
Other times in the year we like now, we don't see a lot of forage. It's pretty dry out there right now. The fires in Yuma County can tell you that, it'll burn fast. It's a dry fuel, and there's not a lot of punch to that right now. So when we start looking about those cows, I think we need to pay a little closer attention to that.

00;04;36;11 - 00;05;07;12
Unknown
What I call green light section after winning, where we can really put some body condition back on those cows, and a very cheaply done by maybe a little extra supplementation, or maybe it's just going to a after crop residue that we have available to us, maybe adding some protein because the protein level in our grasses in the fall of the year really tend to

dry off and protein decreases, particularly when we had a wet year like we did in the spring.

00;05;07;15 - 00;05;32;25
Unknown
Those wet, lush grasses that dry off really quick usually lose a lot of protein content. So this year in particular, our grasses dried very quickly from what our abundant summer was. And I think our protein levels are a little bit lower than they need to be through this fall. So earlier protein supplementation should be there. So while we focus on protein a lot, let's talk a little bit about the energy side of it.

00;05;32;25 - 00;05;56;12
Unknown
Because you can you can put all the protein you want out there. But if she doesn't have the energy in which lactation requires a lot of energy to produce milk reproducing and in general, you know, growing that last third trimester with the calf is going to require a lot of energy. Let's talk about the energy side of that equation and get a little away from protein at the moment.

00;05;56;17 - 00;06;18;10
Unknown
Yeah, I don't want to beat that dry drum, but it looks like our grasses are going to be a little drier this spring than we hope, and maybe be a little late coming in. So any forage, the extra forage that we grew last year, that we're going to go back out into those calving pastures, probably we're not going to have that flush of green type protein feed coming in.

00;06;18;15 - 00;06;39;07
Unknown
We're going to be looking at something that's going to be lower in energy. So we need to pay more attention. It's actually energy that tends to put body condition on and not protein. I know a lot of clients are like, well, my cows are getting a little thin here this fall. I need to up the protein on them a little bit.

00;06;39;13 - 00;07;01;14
Unknown
And why that may be true. Usually body condition is highly related to the amount of energy intake that that cow is getting. So when we look at that from an energy standpoint, in terms of total digestible nutrients, I think it's one of those situations where you really have to stand back and study what you really are needing to give that cow.

00;07;01;16 - 00;07;29;10
Unknown
And part of the reason we need those cows to be in a body condition score five, or those have to be in a body condition score six at calving is we physically on range? Cannot get enough energy into them. That cow has to function and fluctuate and draw on body reserves for that time period of that peak lactation for a month, and those body energy reserves need to be there.

00;07;29;10 - 00;08;06;01
Unknown
And those body energy reserves are energy and not necessarily protein. I do know from some of my graduate studies that muscle plays a more dramatic influence on that, ready to absorb energy. And what the cow uses is energy reserves in situations where we may have blizzard conditions or all of a sudden we've got some drastic changes muscles, more metabolism than some of that external fat to them, but they will eventually recalibrate their system and draw from those body condition score reserves.

00;08;06;08 - 00;08;27;21
Unknown
So with that being said, that cow does need to fluctuate throughout the year in her body condition score, and we want her to be able to utilize that and probably should be selecting genetics that do have the ability to fluctuate and don't just stay fat all the time, because we want to turn those body energy reserves into milk.

00;08;27;21 - 00;08;53;19
Unknown
We want to turn those into being able to be fertile and reproductive. So I think it's important that we select cattle that have some fluctuation. We need to fluctuation. But there's times of year, particularly at calving. We need to pay close attention to what body condition they're in, because if we go in behind there, we can have some drastic impacts on future production.

00;08;53;26 - 00;09;17;07
Unknown
So let's talk about body condition and monitoring that body condition. When do we really need to observe and kind of take a note, record body condition of our cows because it takes a little bit to add and subtract body condition. You know, we've got kind of a weight percentage that we know if their body condition this, it takes this many more pounds to get to the next one.

00;09;17;07 - 00;09;48;09
Unknown
Or if they lose that many, we're going to drop down a body condition score. But when do we really need to look at exactly and monitor our body conditions. So we'll know we're going to be at the right body condition at the right time. So the first time I would say, and probably the easiest is that weaning time, if we can have an idea of what those cows are at weaning time, mainly because that's the most efficient time for us to change a cows body condition, that's very important to have the ability to change that.

00;09;48;09 - 00;10;09;28
Unknown
So at weaning time, that's a good time. The other part about winning time is evaluating them is much easier at that time, because that cow has decreased or milk production to the point that she's probably putting on

flesh. And we get a true understanding of what she looks like after she's produced a calf. And it's easier to do.

00;10;10;03 - 00;10;30;07
Unknown
The other very important time is that prior to calving, just a few days ahead of calving, or when she calves. The problem with trying to evaluate body condition score at calving, when they dump 130 pounds of fluid and feed us out on the ground, there are going to look, then they're going to look sunk in. They're going to do that.

00;10;30;07 - 00;11;08;20
Unknown
So you're going to have to read through the brisket. You're going to have to look around the tail head. You're going to have to look along those transverse processes on the loin edge and be able to evaluate what that cow truly is, if you're going to write it down as she calves. But by the time we get to calving, if we're behind, there's no way in the next 60 days we're really going to make that out without making a significant dollar investment and getting that cows body condition score up right, because her highest usage of energy is going to be right there in that peak lactation time.

00;11;08;22 - 00;11;29;11
Unknown
Second highest is going to be in that third trimester where she's trying to grow that final calf. And we're going to see 60% of the body mass of that fetus. That calf is going to occur internally with her. So those are your two biggest ones. And they come back to back. So number two in the list comes right before the number one.

00;11;29;13 - 00;11;55;29
Unknown
But right is we're in high. Lactation is also usually about the time we're either doing our AI work or wanting to put the bulls out. So how does body condition affect reproduction. Well, some of some of the research data that's come back from Colorado State University of Wyoming, University of Nebraska, some of those research. It looks a cow that is in a body condition.

00;11;55;29 - 00;12;24;28
Unknown
Score five at calving compared to one that's a four tends to return to cycle about ten days earlier. Now that doesn't sound like a lot, but if you stop and calculate that, that gives her two shots to breed so that she calves within a year, she gets almost 21 days. So she's got a shot at that first return to heat, and then she's got a shot at a second one.

00;12;25;00 - 00;12;55;26
Unknown
The cow that's in a body condition. Score four. She's got one shot. If she returns ten days later to Breed and Kevin a year. So if we that cow after four years, she's moved down 2 or 3 cycles. She's losing it. And we're losing her out of a 45 to 60 day calving window pretty fast. So

being on that condition, score five makes a lot of sense in terms of return to fertility.

00;12;55;28 - 00;13;28;28
Unknown
And I'm the numbers guy. So let's just put it off of ten days later may mean a calf being born ten days later at 2 pounds per day on those calves, at the prices we're seeing now in the 300 category for almost 400 pounds, $400 a week, how many dollars did you just lose a significant amount? So like you said, if we're ten days later, 2 pounds is 20 and $5 on a A or $4 on a calf, that's 80 bucks.

00;13;29;04 - 00;13;54;18
Unknown
All right. So when else do we need to check this body condition and kind of monitor where we're at. So I think the other times are highly dependent on the yearly forage production cycle. So if you're a if you're a fall carver, you're probably going to be checking in the middle of the winter on those cows and see what they're doing when it gets really cold and you've got long, cold spells.

00;13;54;20 - 00;14;16;09
Unknown
The other times we're going to look at it is if we have these extended dry periods and we have calves nursing, I mean, we can control some of that body condition score with things like early weaning or maybe a little extra supplementation, depending on what we need. If the grass is just drying up and we need a shot, more protein, or maybe it's a little energy.

00;14;16;12 - 00;14;50;22
Unknown
I think there's times throughout the production cycle of the cow that the environmental cycle falls into place, and you need to be able to randomly choose those other important times. Hey, my cows were at this 25 days ago and now I think they're a body condition score for. And it's because we haven't seen moisture in 25 days. And I've got calves that are now 5,560 pounds heavier nursing on them.

00;14;50;24 - 00;15;12;10
Unknown
We may need to think and adjust either supplementation or some other management practice, such as early weaning, to keep those cows in the correct shape. All right. So in review here real quick Travis are our nutrition for the production cycle on our cows. It's going to fluctuate. It's going to go up and down the hardest times on them.

00;15;12;10 - 00;15;38;22
Unknown
The highest energy and protein needs are going to be that high peak lactation after they've kept 60 to 80 days out. The next highest is going to be in that third trimester right before that time. And so trying to match their nutritional needs, monitoring it with body condition, scoring

and matching it to the forage that we have available and then supplementing what we need to is that our kind of our high points today.

00;15;38;25 - 00;16;07;26
Unknown
Well, I think that's important. And like I said, if you if no other time try to get a body condition score, check on your cows at weaning, separate thin ones from fat ones, and maybe you can send them to a little different pasture that you have. Secondly, make sure that we try to approach that five for cows and six for heifers before we have them, because they're going to need those extra body stores to hit that peak lactation.

00;16;07;26 - 00;16;30;15
Unknown
And the higher the peak lactation, the longer that milk curve grows out. And we can add pounds to that calf. Well, great discussion today, Travis. Again, if you have any questions or comments on today's topic, feel free to contact myself or Travis Taylor. This is Scott. I'm here in the Kit Carson County office and I can be reached at (719)346-5571.

00;16;30;17 - 00;16;52;26
Unknown
And Travis, how do they get ahold of you in the office? Well, I am at (970)332-4151 here in the office and would be willing to take any calls or discuss nutrition at any time. Again, thanks everyone for listening to our Pasture to Profit podcast. We hope you'll tune in next time.

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