

by John Goeser

# Repetition brings strength, consistency, and accuracy

HETHER exercising, practicing your sport, or sighting in your rifle, repetition equates to power. We know this based upon experience. In exercising, repetitions build strength over time. The muscle fatigue experienced equates to stronger muscles and the ability to lift more in the future. In sports, more repetitions equate to consistency when executing a play or making a shot.

When sighting in your rifle, firing a few shots puts you in position to average the shot group and determine the extent to which your rifle is off center. Adjustments can then be made in zeroing your rifle to proceed forward confidently with an accurate rifle.

The three analogous cases here relate to gaining strength, consistency, and accuracy through more repetitions. Your dairy can also achieve greater consistency, accuracy and financial strength with added reps.

In your farm's case, the repetition needs to happen in your fields, within nutrition and feeding, and while executing transition cow and reproductive protocols. In each of these areas, we've found several situations where nickels, dimes, and quarters in margin per hundredweight are uncovered.

#### Repetition in the field

Beginning with your acres at the start of the season or the fall prior, soil

Goeser is the director of nutritional research and innovation with Rock River Lab Inc., Watertown, Wis., and adjunct assistant professor, dairy science department, University of Wisconsin-Madison. sampling and analyses give you and your agronomist an idea of what fertility boost your soil needs to deliver on both yield and quality the following season. The interaction between fertility and quality will be better understood in the months and years to come; however, fertility recommendations to optimize yield are more clear.

In either case, I've learned that some growers rely upon a single soil result per field, and they use this detail repeatedly with multiple growing seasons. Investing in fertility plans with this zero replication approach is like shooting your rifle once and then adjusting your scope just prior to an expensive elk hunt.

There is substantial variation within a field, and the fertility can change over time. Hence, more reps per field via grid sampling can put your agronomist in a much better position to optimize your fertilizer investment. Your team will be much better sighted in for economic returns, especially when fertilizer costs are at a premium.

#### **Repetition in nutrition**

After crops are in storage, many often rely upon a single nutrition analysis to make a decision or gauge the entire crop's quality. In this case, with hundreds to thousands of tons in the silo, using a single forage analysis is like stepping up to the weight bar and doing a single repetition and expecting to be strong. Working with forward-thinking dairies that sample their forages up to several times per week, we're learning that forages are

far more variable than we've understood in the past 20 years.

These observations fall in line with Bill Weiss and Norm St-Pierre's research over the past 15 years. In this case, more repetitions after harvest or during feedout can improve our nutrition program's strength and power through being confident in the forage's nutritional value.

This point is not isolated to forages. As new truckloads of purchased feed show up on the farm, rarely do we account for moisture or nutritional differences or trends over time. Many rely on nutrition software's feed library analysis values for moisture to make very important economic decisions relating to this purchased feed.

This approach is like watching another team practice a play, and then asking your team to conduct the same play. There's no practice and we've got no real experience with the play — we're not in a position to succeed.

As protein and grain prices are trending near record highs, many are rethinking their approach. Recently, some have uncovered impactful moisture opportunities that equate to \$6 to \$8 per ton value or more through less moisture. There is value to be captured in purchased feeds through better monitoring of your purchased feed quality.

In general with your nutrition program, consider putting in more repetitions to monitor your forage and purchased feeds' nutrition values

prior to making important decisions. Work with sample averages and put your nutritionist in a stronger position to advise your dairy farm.

### Repetition in feeding

Much like practicing the play over and over again prior to the game can add to consistency during the game, getting more repetitions in feeding your cows or total mixed ration (TMR) pushups can greatly improve consistency. This may be old news to some. However, feeding and pushing up feed more frequently drives cows to consume feed and lends toward more consistent rumens.

Cows are creatures of consistency. Over the past few weeks, I've recognized dairies that go to extreme lengths in feeding their cows. On one Wisconsin dairy, the owner will lay out fresh feed up to four times per day to put his herd in position to succeed.

This may seem extreme, but dairies like this have found the added repetition each day has been an advantage for their herds and farms. Greater repetition with feeding and pushing up feed warrants discussion with your team, and may be an avenue to add to your bottom line.

## Repetition with cow care

Lastly, while this column focuses on feeding fundamentals, I'd be remiss if I didn't mention the value to be captured with added repetitions in your transition cow or reproductive protocols. Coming back to the consistency point, more frequent close-up or fresh cow monitoring or breeding throughout the week can strongly contribute toward improved consistency within your herd.

Take up this discussion point with your breeder and veterinarian, and don't take old protocols or calendars for granted. Ask them if your frequency and repetition in monitoring your high-value cows is sufficient relative to other leading dairies.

## **Bringing it together**

In closing, with the August 2021 Feeding Fundamentals column "Clean data can power your farm to profit," we discussed the power behind clean data. In the prior article, we recognized that descriptions are important but assumed data and information was already consistently generated.

Here, our focus is stepping back and introducing concepts relating to generating more powerful and accurate data or consistency in protocols. A common theme here is that many have recognized improved strength, consistency, and accuracy in farm data and protocols through added repetitions. Take this discussion point up with your advisory team, and ask if your farm is getting enough repetitions in to be confident in your data and protocols.

