



# Bad weather is another new normal

ONE virtue that warrants admiration is a person's willingness to embrace change and adapt as he or she identifies hidden opportunities. Facing change and adversity isn't always easy. In fact, often it's the opposite. Yet, we must embrace the challenge in front of us, fight through, and ultimately strive to learn as the environment around us changes. I carry the utmost respect for those who feed the world, especially when faced with environmental challenges.



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There are a number of "environments" we work in. Our social, technological, and economic environments have all changed in the past few years with special interest groups' secret videos, rapid advances in on-farm technology, and less than break-even mailbox prices per cwt. (hundredweight) all becoming more frequent. Yet, the environment for discussion here is the one we have lived in the longest and is dictated by Mother Nature — weather.

Weather conditions are changing and a new normal is being recognized. In the past, a number of *Hoard's Dairyman* articles have discussed a "new normal" relative to the economic climate. Now, more extreme weather patterns throughout the year appear to be yet another new normal that producers throughout the world are facing.

There are several ways in which Mother Nature affects our businesses. From winterkill and agronomic challenges, to greater disease pressure due to weather conditions and global shifts in commodity markets in response to projected yield drops. Add on to those three the day-to-day challenges in getting cows fed. Our focus here will be options to consider when weather, winterkill, and planting issues threaten forage inventories and what strategies might help ride out current and future commodity market swings.

## What's your ration?

We often lose sight of economic conditions outside our own county or region. In the Western states, corn prices have been substantially greater than the rest of the U.S. for decades — thus, expensive corn and forage is nothing new to dairymen and women out West.

In the Midwest, it seems planting delays are becoming more frequent each year, resulting in fewer planted acres of corn and soybeans. As a result, future yield forecasts are depressed and future prices rise. Corn prices may jump \$1 or more per bushel for subsequent months.

Why do I mention this? The Midwest and East are now more like what has been the normal for the West.

Rather than run diet projections with expensive corn, I'll reference Mark Linzmeier's recent break-even cost and margin projections for 12 months into the future (accessed via [www.marginsmart.com](http://www.marginsmart.com)). Linzmeier is the president of Dairy Analyzer LLC. He commented that break-even costs are rising between 30 cents to 90 cents per cwt. in response to the yield forecasts and market reactions in the Midwest. When corn production is impacted, diet costs per cwt. will increase, but learning from Western dairies, recognize we can lower grain and starch in diets well below traditional levels.

We can do this by maximizing grain value and starch digestibility. Talk with your nutritionist about options to pull every bit of energy out per bushel. Grind size and aggressive kernel processing are a must. Use a fecal starch measure to benchmark and recognize the new goal is less than 1 percent fecal starch. Taking these steps will help feed less grain and gain more economically effective diets when markets dictate.

## No forage requirement

Beyond corn prices, forage availability and costs also become a challenge with extreme weather swings. Keep in mind, we've got flexibility with forage to concentrate ratios. In a June 2013 *Hoard's Dairyman* article, titled "High forage isn't always your best option," several situations were discussed where moderate to

high-forage diets do not make economic sense. Since 2013, I have further learned how far from "normal" we can take dairy and ruminant nutrition yet still have healthy cows.

When opting for less forage in diets (even as low as 25 percent, I've learned from western U.S. nutritionists), diet nutrient composition needs to change. There are a few benchmarks beyond forage to concentrate ratio that will help keep your herd healthy and productive.

The 2001 Nutrient Requirements of Dairy Cattle (NRC, 2001) recognized that as forage levels in the diet drop, rapidly digestible carbohydrate (starch) levels also need to drop to maintain rumen health. For diets approaching or less than 15 percent forage fiber (on a dry matter basis), diet nonfiber carbohydrate should then be limited to around 35 percent. Consider limiting starch content to less than 20 percent in situations like this and letting total diet fiber levels float up a bit.

More recently, the Miner Institute's Rick Grant and his group have proposed that physically effective undigestible fiber (peuNDF) as a percent of diet could be our new rumen health threshold for nutritionists to balance from. This diet measure combines physical effectiveness factor, determined by a Penn State Particle Separator, with undigestible fiber (uNDF240) to yield peuNDF results somewhere around 5 to 7 percent of DM (dry matter). These numbers are not yet benchmarks, but this peuNDF metric could be much better tied to rumen health. There will be future research coming from our team and others in this area to solidify benchmarks relative to performance.

Regardless of how the diet comes together, try to keep the combined top and middle screens of the Penn State Particle Separator as close to 50 percent as possible. With low-forage diets, find functional fiber with hay and straw sources. A little can go a long way here. Monitor cud chewing and maintain as close to 50 percent cud chewing scores in high-intake pens.

## Watch feed hygiene

Extreme wet-weather patterns

that cause swamp-like field conditions will also impact plant disease pressure and feed hygienic quality (mold, yeast, and negative bacteria levels). Work with your agronomy team during the unfolding growing season to monitor and optimize plant health. Learning from Damon Smith, University of Wisconsin-Madison, and Darcy Telenko, Purdue University, the take home point is step up crop scouting and disease monitoring. Check [www.badger-cropdoc.com](http://www.badger-cropdoc.com) for helpful tips during weather-challenging times.

## You're not alone

One last point I work to stress with producers during these hard times is that you are not alone. Other growers and producers are also experiencing what your farm is. Network with those close to you and share with each other. And work to further engage your advisory team, even consider meeting more frequently. Discuss the plan of attack with economics in mind. Benchmark using feed costs per cwt. and digestible yield per acre, getting away from the use of just feed costs or raw yield.

Take this time to adopt and learn new ways of farming and accomplishing goals. I speculate, optimistically, that the new nutrition programs or agronomic strategies will benefit your business down the road. With that in mind, carry some optimism when experiencing yet another new normal — bad weather. 🐄

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