



QMA Impact Report

Farm	Tylervale Farm – Ed, Duane, and Marie Martin	
Planners	James Romack and Paul Cerosaletti	QMA Code: PFM
Date	December 2020	

Results / Impact

(briefly describe the progress toward QMA goals as well as any increased production or profitability, improved efficiency, improved effectiveness of BMP, etc.)

Evolution of a Solution

Maintaining acceptable dairy cattle ration phosphorus (P) levels is critical to reduce P accumulation and loss from farm fields and protect water quality. What makes this challenging is the day to day variations in the forages P content and the milk production rates of the cows which consume them. The PFM Program planners monitor and quantify this variability in order help 'match' the P content of the homegrown forages with a complementary



purchased grain supplement and ensure that phosphorus is not overfed to the cows. The following excerpts from the 4 PFM benchmarks completed for Tylerview Farm during calendar year 2020 give a glimpse into how the process works.

January 10: ...”An area for improvement appears to be the phosphorus level in the diet. At 126% of requirement, it exceeds the program's target level of 110%... While there is some variation in each load of feed delivered to the farm, it would still be to your advantage to determine the amount of mineral phosphorus included in your grain mix. If mineral phosphorus is not being added, then the excess could be coming from one or more of the protein ingredients, such as wheat midds.”

May 28: ...”The phosphorus level in the diet has dropped nicely since your January benchmark from 126% of requirement to 119%, mainly as a result of increased milk production.”

August 18: ...”The ration P level has increased to marginally from 119% in May, to 120% of requirement in August. Though both are lower than the ration P level in January, they are above the PFM program's target level of 110%, and remain an 'area of opportunity' for the farm.”

October 23: ...”Last, the ration P level has declined from 120% of requirement to 113, and that is good for water quality.”

But it was still over requirement. In early November 2020, the PFM Program planners worked with the Martins and their feed nutritionist to a formulate a diet solution that further reduced P content and brought P feeding level to 101% of animal requirement, eliminating overfeeding entirely, reducing manure P excretions 35%, and saving the farm money.

Mission Accomplished!!

