

## WISCONSIN VIDEOS EXPLORE WAYS TO SAVE ON NUTRIENT COSTS

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If you're looking to make the most of the nutrients your farm holds, check out the short videos on optimizing nutrient management, produced by the University of Wisconsin-Madison (UW) Nutrient and Pest Management (NPM) program. The 12-video series can help farmers save money and avoid applying too much fertilizer to crops that don't need it, says Dan Smith, Southwest Regional Specialist with the NPM program.

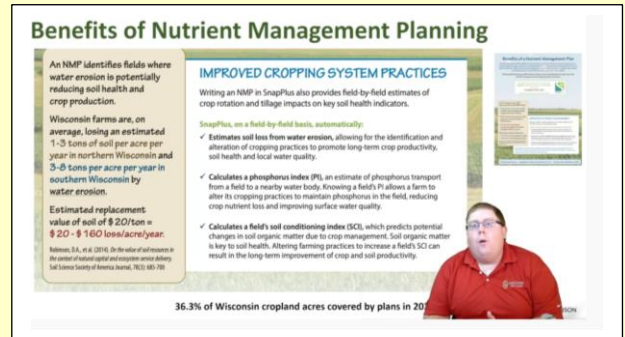
"Back in August 2021, grain prices started to dramatically increase, and also, fertilizer prices," Smith recalls. "We started getting a lot of questions, like: 'How do we manage nutrients that we may already have on-farm?' and 'How do we purchase nutrients to supplement those on-farm resources and work hand in hand in a way that's economically wise and helps reduce environmental risks?'" Farmers wanted to find ways to avoid buying commercial fertilizer at record-high prices, Smith adds.

So he and his colleagues from across the state surveyed land conservation and extension offices to hone in on what information farmers would most value. The videos, some as short as 4-7 minutes, deal with topics including crop budgeting, soil testing, prioritizing applications, legume credits, manure credits, crediting cover crops, and managing sulfur and soil pH. The series, on YouTube ([click here](#)), finished with a video on [writing a nutrient management plan](#).

That video, which Smith narrates, explains why more farms should have nutrient management plans, and not just for regulatory obligations. He hopes farmers will use plans to think about where they spend money on their farms and where they could avoid taking environmental risks when applying nutrients. "Working on developing a nutrient management plan for your farm helps allocate on-farm nutrient resources like manure credits and legume credits from alfalfa terminated recently and combining those with commercial fertilizer sources. So you're able to look at your farm's data via soil testing to say: 'I really do need to purchase commercial fertilizer' or 'Maybe I don't need to purchase commercial fertilizer.'"

"That saves money, but also allows us to target fields that are low in phosphorus or potassium for applications of manure," he points out. "That can help dramatically reduce those chances of loading fields near the barn with a lot of phosphorus and properly allocating those nutrients to areas that need them."

In the video, Smith explains that farmers can write their own plans using SnapPlus (Soil Nutrient Application Planner), University of Wisconsin nutrient management planning software. The Windows-based program calculates potential soil and phosphorus runoff losses on individual fields and helps plan manure and fertilizer applications.



Year	Soil Test	pH	OM	P	K	County	Acres	Pred. Soil	Symbol	Group	Texture	Field Rest.
2022	2021-03-22	6.4	3.4	35	82	Columbia	201.5	Plano	PnB	L	Silt Loam	yes

Year	Crop	Yield Goal	Tillage	Soil Test Date	Lime Rec.	Irrigation / MRTN info	Season notes (lbs/acre)	N	P2O5	K2O	Over(+)/Under(-) adj UW rec.
2022	Corn grain	191-210	Spring Chisel, no disk	2021-03-22	0	0 0.1MRTN	165 40 105	165	40	105	230
2023	Soybeans 30-36 inch row	66-75	No Till	2021-03-22	0	0 0.1MRTN	0 0 0	0	0	0	0
2024	Winter wheat (grain) to e	41-60	No Till, cover crop no till	2021-03-22	0	0 0.05MRTN	0 0 0	0	0	0	0
2025	Corn grain	191-210	Spring Chisel, no disk	2021-03-22	NA	0 0.05MRTN	0 0 0	0	0	0	0
2026	Soybeans 30-36 inch row	66-75	No Till	2021-03-22	NA	0 0.05MRTN	0 0 0	0	0	0	0
2027	Winter wheat (grain) to e	41-60	No Till, cover crop no till	2021-03-22	NA	0 0.05MRTN	0 0 0	0	0	0	0

Year	UW Recommendation	1st & 2nd year legume credit	2nd & 3rd year manure credit	This year's manure	This year's fertilizer	Total credits & applications	Over(+)/Under(-) adj UW rec.	Annual Total PI
2022	165 40 105	0 0 0	0 0 0	0 0 0	230 0 0	65 40 -105	NA	NA
2023	0 30 145	0 0 0	0 0 0	0 0 0	0 0 0	0 -30 -145	NA	NA
2024	55 15 75	0 0 0	0 0 0	0 0 0	0 0 0	-55 -15 -75	NA	NA
2025	140 0 90	0 0 0	0 0 0	0 0 0	0 0 0	-140 0 -90	NA	NA
2026	0 0 130	0 0 0	0 0 0	0 0 0	0 0 0	0 0 -130	NA	NA
2027	55 15 75	0 0 0	0 0 0	0 0 0	0 0 0	-55 -15 -75	NA	NA

The SnapPlus cropping screen shows all crops and fields as well as soil test data for the current year, University of Wisconsin recommendations, and nutrient over- or underapplications.

“SnapPlus has dramatically improved in the last four years or so, with implementation of a lot of tools that are really useful to all farms, like the mapping features, and it has recently adopted new ways to help us manage winter manure. For those producing a lot of forage and grazing livestock, there’s a lot of good tools in SnapPlus to help allocate manure to fields and to help manage grazing rotations for nutrients.”

“It’s also easier to use. I first used SnapPlus in 2012 and had to manually enter a lot of data by looking up charts and looking up on the Web Soil Survey (operated by USDA’s Natural Resources Conservation Service). Now the program will bring that information automatically into it via some data entry that’s very simple,” Smith says.

Farmers need to complete about eight hours of certified training to be able to write their own plans, but that training can be completed via online classes and cost little to nothing. “They’ll just have to pay for soil testing. The base soil testing that we require is one sample per five acres every four years, so if they pay for that testing once, they are good for four years,” Smith says.

“I think it’s a really good investment. We often see, once the plans are written, savings on the average dairy farm of \$10,000, which is conservative. With the higher fertilizer prices, savings of \$30,000-40,000 are pretty common.”

“Farmers get so much out of nutrient management plans; there are so many different things that they can learn about how they can manage nutrients on their farms to help save money. I like to talk about the soil nutrient value of the farm as a savings account; drawing down those excessively high soil test values for phosphorus is really valuable when prices are so high,” Smith says.

For information on nutrient management training courses, check with your county land conservation office. For a listing of certified planners, [click here](#). For more on SnapPlus, [click here](#). The videos, edited by Kolby Grant, Northwest Wisconsin Regional Specialist, can be accessed [here](#) or click on individual titles below:

[Crop Budgeting](#)

[Soil Testing](#)

[Crops Responses Based on Soil Test Levels](#)

[Prioritizing Applications](#)

[Managing Soil pH](#)

[Determining the Economic N Rate of Corn](#)

[Legume Credits](#)

[Crediting Cover Crops](#)

[Manure Credits](#)

[Nutrient Application Efficiencies](#)

[Managing Sulfur](#)

[Writing a Nutrient Management Plan](#)