## Implications of Managing Manure on a Nitrogen Basis

MARCH 15, 2024

2:30 PM ET. 1:30 PM CT. 12:30 PM MT. 11:30 AM PT

Meeting crop nitrogen needs with manure while overapplying other nutrients can save the crop farmer the cost of additional fertilizer, but every decision we make on a farm has consequences. Managing manure based on more than just one nutrient might be more complicated, but it may save our fields from implications that we may not have thought about initially. During this webinar, we will discuss using whole farm and fieldbased nitrogen (N) and phosphorus (P) balances to identify opportunities for improvements in nutrient use and monitor the impact of management changes over time. Presenters will also discuss the time necessary to reduce the soil phosphorus levels after phosphorus fertilization is halted in cropping fields. Additionally, we'll consider the issues with zinc accumulation in soils that have received repeated applications of poultry litter or swine manure and the challenges with managing zinc toxicity.

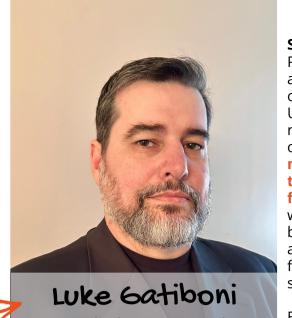
An application for continuing education credit for Certified Crop Advisors (CCAs) and members of the American Registry of Professional Animal Scientists (ARPAS) will be submitted.

## **Additional Information**

• Cornell's NMSP Webpage

**Luke Gatiboni** is an associate professor and Soil Fertility and Nutrient Management Extension Specialist in the Department of Crop and Soil Sciences. Dr. Gatiboni conducts an applied research and extension program focusing on refining the recommendations of fertilizers and lime for North Carolina crops and promoting best management practices of fertilizer use. Dr. Gatiboni supports extension agents, farmers, certified crop advisors, and other state agency personnel with training and publications on soil fertility, nutrient management, conservation practices, and water quality.

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NC State University

**Stephanie Kulesza** is the Assistant Professor of Nutrient Management and Animal Waste in the Department of Crop and Soil Sciences at NC State University. She has an applied research program focused on overcoming challenges associated with manure management and barriers to incorporation of manures into **fertility programs**. Stephanie works with manures and animal ag byproducts to increase the efficiency and effectiveness of their use as fertilizers in the diverse cropping systems of North Carolina.

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Stephanie Kulesza NC State University



**Quirine Ketterings** joined Cornell University in August 2000 to provide leadership for the field crop nutrient management extension and applied research program of the College of Agriculture and Life Sciences (CALS). She established and leads the CALS **Nutrient Management Spear Program (NMSP)**, the applied research teaching and extension program for field crop fertility management that aims to improve grower and agricultural industry management of crop nutrient needs. The team focuses on assessment of dairy sustainability. precision agriculture, greenhouse gas emissions from cropland, and land application of organic nutrient sources including various manure types.

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Cornell University

Agustin Olivo is Ph.D. candidate in the Nutrient Management Spear Program (NMSP) at Cornell University. His research and extension work focuses on strategies to improve environmental sustainability of dairy systems. His projects include characterizing greenhouse gas emissions and nutrient efficiency in dairy systems through whole-farm decision support tools, and developing benchmarks for **field-level nitrogen** and phosphorus use efficiency indicators in corn silage production. Agustin holds a bachelor's degree in agronomy and animal science from the National University of Córdoba, Argentina, and a master's degree from the University of Nebraska-Lincoln,

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