

NMSP Nutrient Management Spear Program

"Relevant questions and sound science for agricultural profitability and protection of the environment"

We improve the profitability and competitiveness of New York dairy, livestock and cash grain operations while maximizing environmental protection.

Agriculture makes a significant contribution to New York's economy. We assess current knowledge, conduct research, identify educational needs, facilitate technology and knowledge transfer, develop management tools, and aid in on-farm implementation of nutrient management strategies to increase farm sustainability across the state.

We partner with farmers, Certified Crop Advisers, nutrient management planners, Cornell Cooperative Extension specialists, Soil and Water Conservation District staff, SUNY campuses and state and federal agencies.

# **1** million

acres impacted by our nutrient management guidelines for NY agriculture

on-farm research partnerships to improve farm economic and environmental sustainability

graduate, undergraduate and postdoctoral researchers involved in our team since 2000

> Cornell College of Agriculture and Life Sciences

# **OUR FOCUS**

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## LAND GRANT RESPONSIBILITY

Develop, implement, and support science-based guidance for nutrient management of New York dairy and cash grain operations.



#### **SOIL HEALTH & CLIMATE RESILIENCY**

Evaluate beneficial management practices such as conservation tillage and cover cropping to reduce greenhouse gas emissions and improve soil health.



### **PRECISION AGRICULTURE**

Facilitate zone-based field management, on-farm research, and in-season adjustments using drones, satellite imagery and yield monitoring.

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## DAIRY SUSTAINABILITY

Collaborate with the dairy industry to assess wholefarm nitrogen, phosphorus, soil carbon, and greenhouse gas sustainability indicators.

### **ON-FARM RESEARCH**

Conduct on-farm trials to help farmers make datadriven decisions that increase profit and minimize environmental impact for whole-farm sustainability.



#### **STUDENT ENGAGEMENT**

Engage undergraduate and graduate students in interdisciplinary experiential learning in a diverse and inclusive environment.









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