



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

275

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

150

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

Cornell
CALS

College of Agriculture
and Life Sciences

OUR FOCUS

1 LAND GRANT RESPONSIBILITY

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

2 SOIL HEALTH & CLIMATE RESILIENCY

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

3 PRECISION AGRICULTURE

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

4 DAIRY SUSTAINABILITY

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

5 ON-FARM RESEARCH

Conduct on-farm trials to help farmers make data-driven decisions that increase profit and maximize environmental protection for farm sustainability.

6 STUDENT ENGAGEMENT

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

