



Dairy Footprinting

NMSP at Cornell University

Nutrient Management Spear Program

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

Dairy Sustainability



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

Context

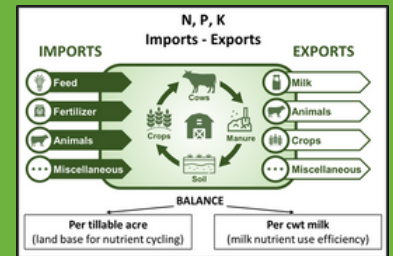


Tools are needed to measure, monitor and report farm progress. Good tools help farmers understand their status, guide improvements, increase farm efficiency, and demonstrate good practices. These tools may also offer farmers **market advantages**.

The Tools

The NMSP uses the whole-farm nutrient mass balance (NMB) tool and Cool Farm Tool (CFT) greenhouse gas assessment to help farmers improve their profitability and competitiveness, while maximizing environmental protection.

NMB: A basic accounting approach to measure nitrogen, phosphorus, and potassium imported and exported on farms.



CFT: An online global tool that takes a whole farm (crop and animal) approach to estimating greenhouse gas emissions with a focus on methane, nitrous oxide, and carbon dioxide emissions, plus potential carbon sequestration.



Why Participate?

Reports

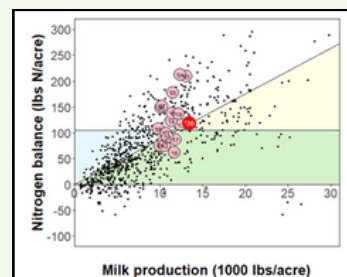


- Each participating farm receives its NMB and CFT with the summary of all farms in the database to which the NMB and CFT could be compared.
- When data are supplied by the farms using our input sheets (see link below), the NMSP team will generate the reports
- Farm identities are kept confidential.
- The NMSP team welcomes farm visits to discuss results.

Nutrient Mass Balance Report



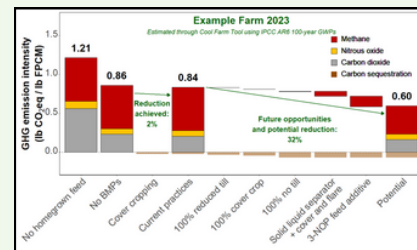
- Identifies opportunities for more efficient nutrient use that could increase profitability and reduce environmental impact.
- Tracks impacts of management changes on whole farm nutrient use over time.



Cool Farm Tool Report



- Identifies emission “hot-spots”, potential emission reduction opportunities and strategies.
- Tracks impact of any management changes to reduce GHG inventories over time.



Contact Information!

If you are interested in participating, contact Quirine Ketterings (qmk2@cornell.edu) or Olivia Godber (ofg6@cornell.edu) at the Nutrient Management Spear Program.

Resources

Nutrient Mass Balance:

<http://nmsp.cals.cornell.edu/NYOnFarmResearchPartnership/MassBalances.html>

Cool Farm Tool:

<https://app.coolfarmtool.org/>

Agronomy Fact Sheets:

<http://nmsp.cals.cornell.edu/guidelines/factsheets.html>

#25 Whole Farm Nutrient Mass Balance

#85 Feasible Whole-Farm Nutrient Mass Balances

#119 Farm Greenhouse Gas (GHG) Inventory

