



**CROPS
COWS &
CRITTERS**
newsletter

Contact Our Specialists



Katelyn Walley

Team Leader
Farm Business Management
 716-640-0522
 kaw249@cornell.edu



Amy Barkley

Livestock
 716-640-0844
 amb544@cornell.edu



Katelyn Miller

Field Crops
 716-640-2047
 km753@cornell.edu



Katie Callero

Dairy Management
 607-422-6788
 krc85@cornell.edu



Kelly Bourne

Administrative Assistant
 585-268-7644 ext. 10
 klb288@cornell.edu

County Association Executive Directors

Allegany County

Laura Hunsberger
 lkh47@cornell.edu
 585-268-7644 ext. 17

Cattaraugus County

Kelly McDonald
 kmm525@cornell.edu
 716-699-2377 ext. 122

Chautauqua County

Emily Reynolds
 eck47@cornell.edu
 716-664-9502 ext. 201

Erie County

Diane Held
 dbh24@cornell.edu
 716-652-5400

Steuben County

Tess McKinley
 tsm223@cornell.edu
 607-664-2301

(USPS #101-400)

Cornell Cooperative Extension of Chautauqua County
 Subscription included in minimum of \$65 Program Participation fee.
 Periodical Postage Paid at Jamestown, NY 14701. "POSTMASTER:
 Send address changes to the: Chautauqua County Extension
 Connection at 525 Falconer St. JCC Carnahan Center, PO Box 20
 Jamestown, NY 14702-0020." "Cows, Crops, and Critters
 Newsletter" by the Southwest New York Dairy, Livestock, and
 Field Crops Program with Cornell Cooperative Extension in
 partnership with Cornell University and the five county region of
 Erie, Chautauqua, Cattaraugus, Allegany, and Steuben and their
 CCE Associations. To simplify information, brand names of
 products may be used in this publication. No endorsement is
 intended, nor is criticism implied of similar products not named.
 Every effort has been made to provide correct, complete and up-
 to-date pesticide recommendations. Changes occur constantly
 and human errors are still possible. These recommendations are
 not a substitute for pesticide labeling. Please read the label
 before applying pesticides.

By law and purpose, Cooperative Extension is dedicated to
 serving the people on a non-discriminatory basis. Newsletter
 layout and design by Katelyn Walley-Stoll.

County Association Agriculture Educators

Cristian Acosta

Allegany County
Agriculture Educator
 cfa34@cornell.edu
 585-268-7466 ext. 14

Kathleen McCormick

Erie County
Agriculture Educator
 km864@cornell.edu
 716-652-5400 ext. 146

Sharon Bachman

Erie County
*Agriculture & Natural
 Resources Educator*
 sin2@cornell.edu
 716-652-5400 ext. 150

Susan Walker

Steuben County
Agriculture Educator
 smw272@cornell.edu
 607-664-2574

Lynn Bliven

Allegany County
*Ag & Natural Resources
 Issue Leader*
 lao3@cornell.edu
 585-268-7466 ext. 18

Melissa Watkins

Chautauqua County
Agriculture Educator
 mew235@cornell.edu
 716-664-9502

John Whitney

Erie County
Agriculture Educator
 jrww44@cornell.edu
 716-652-5400 ext. 146

Individual articles may be used for educational purposes with the permission of the author and proper credit given to the author and our publication.

**CROPS
 COWS &
 CRITTERS**
 newsletter

For accommodations or accessibility concerns, please contact our specialists at least one week prior to the scheduled event. If you need information provided in a different format, call 716-640-0522.

Welcome Katie Callero!

Southwest New York's Dairy, Livestock, and Field Crops Team welcomes new Dairy Management Specialist

Cornell Cooperative Extension's Southwest New York Dairy, Livestock & Field Crops Program (SWNYDLFC) is excited to welcome Katie Callero as their team's Dairy Management Specialist. Katie will be working on programming related to herd health, milk quality, calf care, nutrition, grazing, and more. You can reach Katie by calling 607-422-6788 or emailing krc85@cornell.edu.

Katie Callero's journey into the world of animal science began with her early fascination with animals as a child. Katie then pursued higher education at Cornell University, where she earned a Bachelor of Science degree with a major in Animal Science and a minor in Infectious Disease Biology, graduating with the distinction of cum laude.

After graduation, Katie worked as a lab manager for a dairy cow research lab housed in Cornell's vet school that focuses on transition cows. This experience sparked her interest in the world of research, and she decided to return to Cornell University to pursue her Master's of Science. Her thesis was focused on the behavior and welfare of cows and calves in relation to separation.

Katie is eager to connect with local producers and learn about their needs. She will be spending her first few months on the team visiting our region's farms and agribusinesses to learn more about the successes and needs, and how she might be able to help. She has been an incredible asset to the team already and will be another resource for the farmers in our region!



SAVE THE DATE

LABOR ROADSHOW VIII

In Person Sessions
Online Sessions

Speakers, topics, and more to be announced!

2024
Dec. 11 & 13
Dec. 17 & 18

Presented by the New York Ag Workforce Development Council

We're so excited to have a full team again and are grateful to share Katie's expertise and experiences!

**CROPS
COWS &
CRITTERS**
newsletter

If you'd like to set up a meeting with our new dairy specialist, please don't hesitate to contact her at 607-422-6788 krc85@cornell.edu.

Selling Turkeys This Year? Reminders for Labeling & Handling

By Amy Barkley, Livestock Specialist, SWNYDLFC

As you're planning your turkey harvest and sales, keep safe handling, proper labeling, and regulations for sales in mind to enjoy a stress-free and food safety-forward holiday season.

PROCESSING REGULATIONS

Farmers can either process turkeys on their farm or through a certified 5A Small Enterprise exempted processor. If the goal is to sell the turkeys, keep in mind that not all 5A certified facilities are permitted to process for resale. Many only process poultry for the grower's home use. Verify with your processor that they have the Small Enterprise exemption.

If processing on-farm, you are permitted to process up to 250 turkeys per year per farm. If you process other poultry on-farm, then each of those counts as $\frac{1}{4}$ of a turkey. In other words, the rule states that you can process up to 1,000 poultry on-farm, where 1 turkey is equal to 250 chickens. If you end up sending poultry to a processor in addition to processing on-farm, then only the number that you process on-farm counts towards the total. If you're processing on-farm for home use, those birds aren't counted in your processing total.

There are best management practices associated with processing poultry on-farm to achieve quality and food safety. Those can be found in the Cornell On-Farm Poultry Slaughter Guidelines: <https://smallfarms.cornell.edu/resources/guides/on-farm-poultry-slaughter-guidelines/> or contact Amy for a printed version of the guidelines.

LABELING

New York State has adopted federal labeling requirements. This is to allow for full transparency of the product as well as providing contact information for traceability purposes. All poultry needs to be labeled with the following:

- Product name using the species and part (whole turkey, whole turkey with giblets, turkey breast, turkey drumsticks, etc.)
- Inspection legend if processed at a 5A facility
- Exempted notation if processed on-farm. That exact statement is, "Exempted — P.L. 90-492"
- Farm name and address
- Packed on date
- Sell by date, where fresh turkeys must be marked that they are to be frozen within 4 days of processing. Frozen meat does not require a sell-by date, though most producers aim to sell their products within a year for best quality.
- If selling by the pound, price per pound, where you can only sell by the pound if using an Dept of Weights and Measures certified and inspected scale.
- If selling by the package rather than by the pound, a price per package.

SAFE HANDLING INSTRUCTIONS

- Keep refrigerated or frozen. Thaw in refrigerator or microwave.
- Keep raw meat and poultry separate from other foods. Wash working surface (including cutting boards), utensils, and hands after touching raw meat or poultry.
- Cook thoroughly.
- Keep hot foods hot. Refrigerate leftovers immediately or discard.

SAFE HANDLING INSTRUCTIONS

THIS PRODUCT WAS PREPARED FROM POULTRY MEAT. SOME FOOD PRODUCTS MAY CONTAIN BACTERIA THAT COULD CAUSE ILLNESS IF THE PRODUCT IS MISHANDLED OR COOKED IMPROPERLY. FOR YOUR PROTECTION FOLLOW THESE SAFE HANDLING INSTRUCTIONS. EXEMPT P.L. 90-492



KEEP REFRIGERATED OR FROZEN.
THAW IN REFRIGERATOR OR MICROWAVE.



KEEP RAW MEAT AND POULTRY SEPARATE FROM OTHER FOODS. WASH WORKING SURFACES (INCLUDING CUTTING BOARDS), UTENSILS, AND HANDS AFTER TOUCHING RAW MEAT OR POULTRY



COOK THOROUGHLY.



KEEP HOT FOODS HOT.
REFRIGERATE LEFTOVERS IMMEDIATELY OR DISCARD.

Example of a safe handling instructions label.

If using an outside processor, get your appointment ASAP if you don't already have one. They book out months in advance.

**CROPS
COWS &
CRITTERS**
newsletter

You can sell whole turkeys or turkey parts under the NYS 1,000 bird exemption. To do so, be sure to follow best management practices and labelling requirements.

Your Local Neighborhood Farm



123 Street, Anywhere, NY 12345

Product: _____

Packed on: _____ Sell by (fresh): _____ Sell by (frozen): _____

Net Weight: _____ Price per Pound: _____ Total Price: _____

Exempted – P.L. 90-492

Example of a complete poultry label (if you are affixing the safe handling instructions label separately) for on-farm processed poultry that allows flexibility in whether the product is fresh or frozen, and sold by the pound or by the item.

Claims cannot be made on the package without justification. Comparative wording such as "healthier" or "fresher" aren't allowed. Furthermore, neither are claims of altered nutritional values. If the meat is tested for nutrition at a certified laboratory to make a claim, a nutrition label is required in addition to the claim. Otherwise, a nutrition label is not required.

Do not use any certified seals on the carton unless you have a current certification. This applies most often to organic or welfare claims. However, you can use descriptors of your management practice on the cartons, such as "turkeys raised on pasture" or "non-GMO fed".



TRANSPORTATION

Keep fresh poultry below 45°F and frozen poultry below 32°F during transport. This is best achieved by mobile coolers or freezers. Fully frozen poultry can last for a short time in coolers packed with ice, especially if they are coming out of a deep freeze (less than 0°F). Fresh poultry should be packed in an abundance of loose ice to maintain proper food safe temperatures. Ice packs don't provide enough cooling power to keep fresh poultry cool, especially if it's warm and sunny.

SALES

Turkeys that have been processed on-farm can only be sold to the end consumer, though you can make sales off the farm, through a farm stand or store you own, or through a farmer's market. If your turkeys have been processed by a 5A Small Enterprise Exempt facility, you can sell them to a wider range of customers, including direct sales, sales at stores other than one you own, hotels, restaurants, and institutions.

If you have any questions about poultry processing or regulations, reach out to Amy Barkley
716-640-0844 or amb544@cornell.edu.

Look for waterproof labels that can stick to wet packaging or frozen products. It'll save you headaches in the long run!

**CROPS
COWS &
CRITTERS**
newsletter

Although it's not a requirement, it's important to purchase product liability and farm insurance when selling your own product to consumers.

Summary: State Opens up \$4.25M in Grant Funding for Beginning and Disadvantaged Farmers

By Amy Barkley, Livestock Specialist, SWNYDLFC

New York State Agriculture Commissioner Richard A. Ball today announced that applications will open this fall for two competitive State grant programs: the Beginning Farmer Grant Program and the Socially and Economically Disadvantaged Farmer Grant Program. The programs, which offer support to New York farmers who are new to the field or who face disproportionate social and economic barriers to success, will provide funding for a wide range of start-up and operational costs and offer support for marketing, training, and more.

Both the Beginning Farmers Grant Program and the Socially and Economically Disadvantaged Farmers Grant Program aim to expand opportunities to farmers who are less likely to enter or succeed in the field, whether due to lack of experience, inability to access resources, or social and economic discrimination. Opening doors to all farmers is a critical step in ensuring a strong, diverse, and well-supported agricultural future for New York.

Both programs provide funding for:

- the start-up, improvement, or expansion of a farm operation;
- the purchase of agricultural land and physical structures;
- the purchase of machinery, equipment, or livestock;
- the construction or improvement of physical structures, including semi-permanent structures;
- worker or apprenticeship training; and
- marketing activities.

BEGINNING FARMER GRANT PROGRAM

Administered by the New York Farm Viability Institute, the Beginning Farmer Grant Program's goal is to assist beginning farmers with the financial costs associated with the creation or expansion of a new farm operation. The program will award grants to for-profit farm businesses operating within New York State that are start-ups or have been in business for less than ten years.

Applications will open October 25, 2024 and will be available through January 24, 2025.

Questions regarding the Beginning Farmer Grant Program can be sent to New York Farm Viability Institute at: arandolph@nyfvi.org



agriculture.ny.gov

This opportunity is the first of its kind since the pandemic! Beginning farmers are those who have been operating a farm business for fewer than 10 years.

6 - November 2024

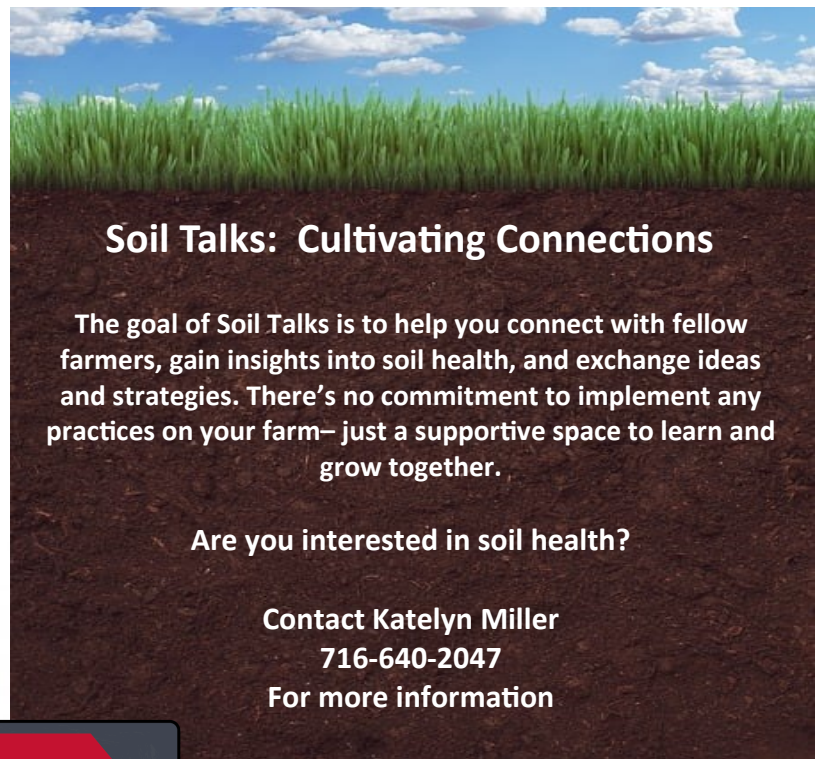
SOCIALLY AND ECONOMICALLY DISADVANTAGED FARMER GRANT PROGRAM

The Socially and Economically Disadvantaged Farmers Grant Program is administered by the Northeast Farmers of Color Land Trust (NEFOC). Funding will be offered under the program name "Landing Access: Novel Directions (LAND) Project." The LAND Project's goal is to assist farmers who face disproportionate barriers to success due to discrimination.

The program will award grants to for-profit business owners who experience discrimination by virtue of their membership in a particular group and whose ability to enter into farming or the success of their farm enterprise has been impaired due to disproportionate access to capital, credit opportunities or land, among other things.

Applications open on December 30, 2024 and will be available through February 14, 2025.

Questions regarding the LAND Project can be sent to: info@nylandproject.com



Soil Talks: Cultivating Connections

The goal of Soil Talks is to help you connect with fellow farmers, gain insights into soil health, and exchange ideas and strategies. There's no commitment to implement any practices on your farm— just a supportive space to learn and grow together.

Are you interested in soil health?

Contact Katelyn Miller
716-640-2047
For more information

**CROPS
COWS &
CRITTERS**
newsletter

Our Farm Business Management Specialist, Katelyn Walley, is available to assist with your grant applications!

Garbage Feeding Livestock

By Amy Barkley, Livestock Specialist, SWNYDLFC

Garbage feeding is the term for the practice of feeding food scraps, food waste, or food industry byproducts to livestock. For some, it provides the opportunity to supply cheap calories in the diet. For others, it's a necessary nutrient-rich component to make a cost-effective complete feed. Regardless, it's a way to utilize human food resources in a sustainable manner.

Feeding vegetarian scraps is not usually a problem, so long as the food is free of mold, excess bacteria, or decay. The regulations arise when it comes to meat scraps. There are many diseases that are transmitted through meat that can affect livestock. A couple of these include devastating and foreign animal diseases like African Swine Fever and Bovine Spongiform Encephalopathy ("Mad Cow"). Therefore, regulations have emerged for food scraps containing meat and animal by-products to be processed at 212 degrees Fahrenheit for at least 30 minutes by a licensed facility. This essentially heat sterilizes them. While the cooking process is required for feeding pigs food scraps, ruminants aren't to be fed the protein of any mammals to prevent the transfer of disease. With these restrictions in mind, it's best to avoid meat-based food scraps all together for all species to be on the safe side.

The good news is that you can feed any kind of vegetarian food scraps, including culls, peels, trimmings, and pulps. Bakery and fruit or vegetable waste from grocery stores is also commonly fed. Food processing waste such as bakery waste or brewer's grains are other options for a reduced cost livestock feed. Dairy waste, such as cheese rinds or whey also can be fed to livestock without the need to be heat sterilized.

All this said, if you're feeding animals that you harvest products from for home use only, household and food scrap regulations do not apply. These only apply to animals that produce meat, eggs, or milk that is sold.



The biggest thing to keep in mind with garbage feeding is to not feed meat products unless processed by a certified facility.

**CROPS
COWS &
CRITTERS**
newsletter

Cull produce, baked goods, and brewer's grains are common allowed feed items for livestock.



Dear Agricultural Producers,

I am reaching out to ask if you would be willing to participate in a focus group meeting about agrivoltaics, or the dual use of land for agricultural and solar energy production.

I am conducting research with Dr. Rich Stedman, Professor and Department Chair, Department of Natural Resources and the Environment at Cornell University. Our research project is guided by the recognition that large-scale solar development is in its early stages, and there is increasing discussion about developing agrivoltaics to meet agricultural and energy generation needs. However, much remains unknown about how agrivoltaics are perceived by agricultural producers themselves.

Would you be willing to participate in an in-person focus group? The meeting will include 6-8 agricultural producers from your area and take about 2 hours. Light refreshments will be provided along with a \$20 gift card to compensate you for your time. We would benefit from hearing your perspectives and experience!

Please let me know if you are interested and I will be back in touch about scheduling.

Thank you for your consideration, and I hope to hear from you soon.

Sincerely,
Dr. Katie Walsh
Kbw45@cornell.edu

Decoding Your Soil Test Results

By Katelyn Miller, Field Crop & Forage Specialist, SWNYDLFC

Regular soil sampling is important for improving management practices, but many people feel confused when they receive their test results. With so much information, it can be hard to know what to do next. In this article, I'll explain the different measurements found in soil test reports and how to use this information effectively.

Soil pH: pH is a measure of active acidity and is determined by the concentration of hydrogen ions (H+) in the soil. For most crops, a pH between 6.0 and 7.0 gives the best nutrient availability. If the pH of the soil is too high or low, adding additional fertilizer will not fix any deficiencies. Along with pH, a soil's buffer pH is measured. This value refers to the ability of the soil to resist changes in pH. A good buffer pH for a given pH value is close to the desired pH.

Lime: To correct a low pH, lime should be added. If an addition is needed, the recommendations will provide you with a value to apply in tons/acre. This value is the rate to apply for a product that has 100% ENV (Effective Neutralizing Value). This value represents the fineness of the material. All reputable lime that you purchase will have the ENV value on its label. If the value of the lime you purchased is not 100%, you can calculate your lime application rate with this formula:

$$\text{Rate of use} = \text{recommended rate}/\text{ENV (of lime source)} \times 100$$

Here is a sample problem:

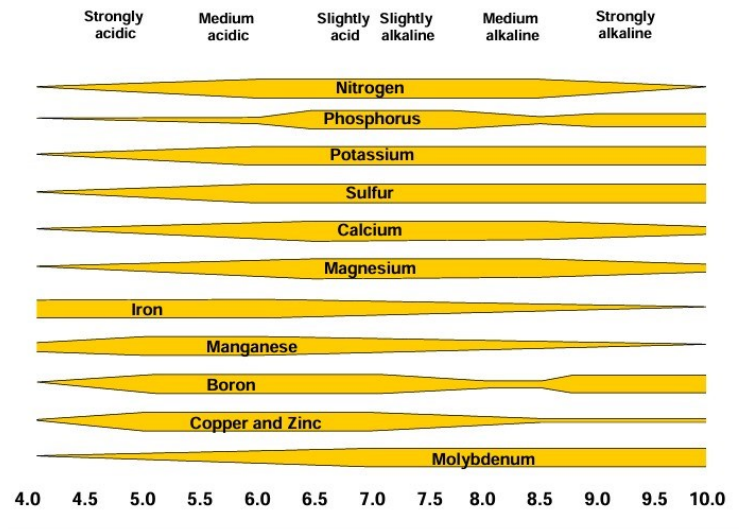
Soil test recommendation is 1.5 tons/acre of 100% ENV;
the material you purchased has an ENV of 70.3%

$$\text{Lime rate (tons/acre)} = (1.5 / 70.3) \times 100 = 2.1 \text{ tons/acre}$$

It's important to remember that additions of lime will not result in immediate pH changes. In many circumstances, it may take as long as six months for a significant change in pH to occur.

Crop	Normal Growth pH Range	Recommended pH range
alfalfa	6.5-7.5	6.6-7.0
barley	6.3-7.0	6.3-6.5
birdsfoot trefoil	6.0-7.0	6.3-6.5
clovers	5.8-7.0	5.8-6.2
corn	5.8-7.0	5.8-6.2
grasses	5.8-7.0	5.8-6.2
oats	5.8-7.0	5.8-6.2
soybeans	6.5-7.5	6.6-7.0
wheat	6.3-7.0	6.3-6.5

*Recommended pH ranges for common crops.
Data from Northeast Region Certified Crop Advisor Resources.*



Availability of plant nutrients with pH.

Photo from Nutrient Management Spear Program

Nitrogen: As you may have noticed, Nitrogen is not measured on the soil test you received. Nitrogen is not measured because it cycles too quickly between chemical forms, is sensitive to weather changes, and is prone to leaching. Recommendations are provided based on the crop you listed on the submission form. The provided value can be adjusted to account for legumes, manure applications, and organic matter contributions.

Major Nutrients: The macronutrients tested are Phosphorus (P), Potassium (K), Calcium (Ca), and Magnesium (Mg). The values reported are in pounds per acre and are rated as very low, low, medium, high and very high. When nutrient values fall into the optimum category and above, fertilizer additions are typically not recommended. This is determined by the crop you selected on the submission form. When nutrient values are low, recommendations are at the bottom to inform you of how much of that nutrient should be applied.

Minor Nutrients: The micronutrients tested include Iron (Fe), Manganese (Mn), and Zinc (Zn). These nutrients are required but are not needed in large quantities in the plant. In addition, Aluminum (Al) is tested but is not an essential nutrient for the plant. These are not rated on a scale of low, medium and high. If $Mn + Fe + Al = > 150$ lbs./acre, plant toxicity can result. If you have concerns about other micronutrients being deficient or present in excess, additional tests are available.

Organic Matter: Organic matter (OM) takes up a small percentage of the soil, but it is critical for healthy soil function. OM feeds microbes, helps soil structure, improves water retention, and much more. For each percentage of OM, you can expect 10-20 pounds of plant-available nitrogen to be released during the growing season (depending on weather and temperature).

Contact Katelyn Miller with any questions about crop production or soil sampling at 716-640-2047 or km753@cornell.edu.



This article is designed to help you interpret your soil results after sending samples to Dairy One.

Fertilizer Recommendations: The fertilizer recommendations listed at the bottom of the report are generated by the Cornell Recommendations Engine. The recommendations are listed in pounds per nutrient, not pounds of fertilizer. Calculations are needed to determine the pounds of fertilizer you need to apply to meet the nutrient needs. A basic formula to calculate how much fertilizer you may need is:

Pounds of fertilizer = pounds of nutrient needed / percent nutrient in the fertilizer

Here is a sample problem:

The recommendation is to apply 80 pounds of K2O/acre. How much muriate of potash (0-0-62) should be applied to meet this recommendation?

80 lbs. K2O / .62% fertilizer value = 129 lbs./acre

To calculate fertilizer needs with two separate fertilizer products:

The soil results call for 80 lbs. P2O5/acre and 95 lbs. of K2O/acre. If the source of P2O5 is 0-46-0 and the source of K2O is 0-0-60, how many pounds of each product do you need to meet those nutrient needs?

P2O5:

80 lbs. needed / .46% in fertilizer = 174 pounds of fertilizer needed to apply 80 lbs. of P2O5/acre

K2O:

95 lbs. needed / .60% in fertilizer = 158 pounds of fertilizer needed to apply 95 pounds of K2O/acre


To calculate the total amount of fertilizer you would need, multiply those calculated values by the number of acres you are planning to apply the fertilizer too.

Comments: At the bottom of the results, comments are provided. These are important to read as they will provide more information on instructions and application timing.

This article is based on results from sending soil samples to Dairy One under Form A. Accurate results first rely on a good sample taken. Contact your local Cornell Cooperative Extension office for more information on how to properly conduct soil samples and interpret results. The numbers in front of the bolded topics correlate to a number on the sample soil results provided for easy referencing.

Soils Analysis Report
with Agro-One Nutrient Guidelines
generated by Cornell University

Dairy One
730 Warren Road
Ithaca, NY 14850
Phone: (800) 344-2697
Fax: (607) 257-1350
www.dairyone.com



Lab Sample ID: _____
Field/Location: _____
Date Sampled: _____
Date Tested: _____
Statement ID: _____
Description: _____
County: _____

A

Element	lbs/acre*	Very Low	Low	Medium	High	Very High
Phosphorus (P)	2	████████████████████				
Potassium (K)	135	██				
Calcium (Ca)	1,893	██				
Magnesium (Mg)	306	██				

Element	Value	Element	Value	Element	Value
Soil pH	5.1	Manganese (Mn), lbs/acre	32.1	% OM	5.0
Buffer pH	5.4	Zinc (Zn), lbs/acre	1.7		
Iron (Fe), lbs/acre	50.3	Aluminum (Al), lbs/acre	312.2		

Crop History (1 = last year, etc.)		Sample Information Summary			
Year	Crop	Soil Name: Volusia	Crop Code: GRT		
3	Grasses Seeding	Tillage Depth: No Till	Type: Maintenance		
2	Grasses Maintenance	Drainage: Not Specified			
1	Grasses Maintenance	% Legume: 100% Non-legume			

Soil Fertilizer Recommendations (1=current yr, 2=next yr, etc.)		tons / acre	lbs / acre		
Year	Crop	Lime	N Range	P2O5 Range	K2O
1	Grasses Maintenance	4.00	50 - 75	40	0.00
2	Grasses Maintenance	0.00	50 - 75	40	0.00
3	Grasses Maintenance	0.00	50 - 75	40	0.00

8 Comments - Improve yield and plant quality as well as protect the environment with proper fertilization.

* Morgan analysis results reported in pounds per acre.
Nutrient recommendations provided by Cornell University. For assistance interpreting your report, contact your local Cooperative Extension office at 715.699.2377 or <http://cce.cornell.edu/Pages/Default.aspx> for a complete list of Cornell Cooperative Extension offices.
Nutrient recommendations provided by Cornell University.
These are general comments. Always consult with your crop adviser for recommendations specific to your farm.
Yr1 Lime rate is for 100% ENV. To calculate actual rate: rate to use = recommended rate/ENV (of lime source) x 100.
Yr1 Iron, aluminum and manganese may be present at toxic levels - avoid by adding lime.
Yr1 Economic lime rate for topdressing sod or no till crop is 3 tons/acre. Apply 3 tons/acre and resample in 3 years or before plowing.

Page 1 of 1 Visit <http://cna1.cals.cornell.edu/links/index.html> or www.dairyone.com for interpretive information. 4M

For more assistance, Katelyn Miller is available to help with interpreting soil sample reports and determining application protocols.



Soil samples can be mailed through your local Cornell Cooperative Extension office!

Manure-Handling Emergency Action Plans

By Mike Hunter, Cornell Cooperative Extension Jefferson County

Every farm, regardless of size, that handles animal waste must be prepared to manage a manure-handling emergency. Manure-handling emergencies usually involve a discharge or spill of manure and therefore they pose a threat to human and environmental health. While prevention is the best strategy to reduce the risk of this type of emergency, not all manure spills can be prevented; therefore, a written emergency action plan must be developed for every farm. An emergency action plan is implemented in the event of a manure discharge or spill. The plan addresses the following areas: eliminating the source, confining the spill or runoff to as small an area as possible, assessing and recognizing the problem, notifying the proper authorities, and cleaning up the spill or runoff.

Each farm should identify all locations where system failure may occur, and how serious a problem it may present. This part of the emergency action plan involves determining possible solutions for anticipated emergencies. It must address ways to eliminate or stop the source of the spill or runoff. This pre-planning strategy will also serve as an educational tool for the employees. All employees, even those not directly responsible for animal waste equipment, should be familiar with the manure handling system. For example, they should know the location of all valves, how they function and how to turn them off.

Methods to confine the spill or runoff to as small of an area as possible must also be included in an emergency action plan. Containing liquid manure or runoff will likely require creating temporary diversions, digging holes or using soil to form emergency dikes. Incorporation of the manure into the soil surface will also reduce runoff from a field. To confine spills quickly, equipment must be available for immediate assistance. Operations that do not have a bulldozer, backhoe or tillage equipment should include a list of equipment owned by those who have agreed to assist in an emergency. In addition, other equipment that should be available includes: a liquid manure tanker truck, a vacuum tanker, a manure pump, manure irrigation equipment and inflatable tile plugs.

After any manure spill or runoff occurs, a process to assess and identify the problems must be followed. Most emergency action plans contain a list of questions to be answered. The following are suggested questions to consider: Did the manure reach any surface waters? Approximately how much manure was released and for what duration? Was there any damage noted, such as employee injury, fish kills, or property damage? Did the spill leave the farm property? Does the spill

have the potential to reach surface waters? Have potable water wells been threatened? The written responses to these questions should be kept for future reference and emergency response training.

Notification of the proper agencies and local authorities must be done in a timely manner. If the spill leaves the property or enters surface waters, call local EMS officials. Agencies that will be able to provide advice and technical assistance include: local Soil and Water Conservation Districts, local Natural Resources Conservation Districts and the Cooperative Extension Service. Information to provide when calling agencies include: your name, telephone number, nature of the emergency, location of the spill including address and site description, the direction of spill movement, the immediate perceived impact, and any control action implemented.

Clean up efforts in manure spills or runoff should be documented and kept with the emergency action plan for future use. Written documentation should include the cause of the emergency, the procedure used to handle the emergency, a list of authorities that were called and those that responded, and the time it took for authorities to respond. The state water quality agency or other technical assistance agencies may provide advice on handling the clean up of the manure emergency.

In summary, emergency action plans are a valuable tool for farms that handle animal waste. The plan serves many functions such as identifying potential risks, identifying resources required to control a manure-handling emergency and identifying available resources.

References:

- Albrecht, J. E. Emergency Action Plan, South Carolina Confined Animal Manure Managers Certification Program, Clemson University.
- Fonner, R. How Can I Develop an Emergency Response Plan for My Livestock Facility?, 1999 Livestock Waste Management Conference, Bioenvironmental Engineering at the University of Illinois Urbana-Champaign.
- Livestock and Poultry Environmental Stewardship Curriculum. Emergency Action Plans.
- Smith, J.M. Manure Spill Emergency Management, Ohio State, Extension, Auglaize County, Ohio.
- State of New York, Department of State, Office of Fire Prevention and Control. 1993. Hazardous Materials Incident Command Workbook.

Remember the 4 C's of Manure Spill Response
– Control, Contain, Call, Clean.

**CROPS
COWS &
CRITTERS**
newsletter

Every farm, regardless of size, that handles animal waste must be prepared to manage a manure-handling emergency.

Example Emergency Action Plan

Farm Name: _____

Location: _____

Phone Number: _____

In Case of a Manure Spill Emergency

- 1) Eliminate Source
- 2) Contain Spill
- 3) Notify
- 4) Clean-up

Contact Agencies and Information

Call 911 and provide them with the following:

- ⇒ Your Name
- ⇒ Address and Phone Number
- ⇒ Exact location of the incident
- ⇒ Description of the emergency
- ⇒ Estimates of the amounts, area covered and the distance the manure traveled
- ⇒ Whether manure has reached ditches, waterways or streams
- ⇒ Are there any injuries to people, fish kills or property damage?
- ⇒ What is being done and the assistance needed

Call the appropriate Environmental Agency. Phone: _____

In New York State contact the New York State Department of Environmental Conservation Hazardous Material Spill Response Team to report the manure spill.

Contact the local: Soil and Water Conservation District. Phone: _____

Cooperative Extension Service. Phone: _____

Local Highway Department. Phone: _____

Equipment operators and farmers who have agreed to assist in an emergency:

<u>Name</u>	<u>Equipment Available</u>	<u>Daytime Phone</u>	<u>Evening Phone</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

This is an example emergency action plan that can be used when thinking about manure spills.

**CROPS
COWS &
CRITTERS**
newsletter

It's helpful to have this printed and posted and to also have key agency phone numbers on your cell phone.

The Crops, Cows, and Critters (USPS#101-400)
is published monthly by Cornell Cooperative Extension
of Chautauqua County, JCC Carnahan Center
525 Falconer Street, PO Box 20
Jamestown, NY 14702-9608.

Periodical Postage Paid at
Jamestown, NY 14701.



Don Wild

Box 7, Great Valley, NY 14741

716-969-4386

King's Agri Seeds - WNY, Forage Mgt. Ser.



"We plant the seeds to your success"

Feed | Seed | Lime | Fertilizer | Farm Supplies

3186 CR 61 | Andover NY | 607-478-8858

94 Front St | Addison NY | 607-359-2424



Your first choice for crop insurance.

Kim Cervone

Crop Insurance Specialist

585-416-0352

kim.cervone@cropgrowers.com

Kenneth (K.C.) Slade

Livestock Insurance Specialist

607-591-2460

Kenneth.slade@cropgrowers.com



FARM CREDIT EAST

Patrick Coates

607-654-3660

Patrick.Coates@farmcrediteast.com



Providing free and confidential consulting
for NYS farmers and agribusiness
professionals.

Contact us today!

1-800-547-3276

www.nyfarmnet.org



**FULL USDA processing
facility (beef & pork)
with retail store.**

**Private labeling
available.**

585-708-42122

4154 East Main Street Road

Attica, NY 14011



Andy Vosburg

avosburg@pdscows.com

716-697-5758

**PROGRESSIVE DAIRY
SOLUTIONS**

A NUTRITION & MANAGEMENT CONSULTING FIRM

**WANT TO SEE
YOUR AD HERE?**

Contact:

Kelly Bourne,

Administrative Assistant

585.268.7644 ext. 10

k1b288@cornell.edu

**THANK YOU TO OUR
SPONSORS!**

WE APPRECIATE YOU!