2020 Winter Crop Meeting

*Save the Date*
Friday, January 24

Where: Clarion Inn - Ithaca
2310 N. Triphammer Road

When: 9:00 am: Registration & Trade Show
10:00 am - 3:15 pm: Speakers Program

CCA & DEC Credits In Application

Cost: $30—Pre-registration
$35—At door
Includes Lunch

To Register:
Contact Donette @ 607.391.2662 or dg576@cornell.edu
Or online at http://scnydfc.cce.cornell.edu

Questions?
Contact Janice @ (607) 391-2672 or jgd3@cornell.edu

Speaker Topics:

Corn Silage Management Practices Revisited
Dr. Jerry Cherney Crops and Soil Section in the School of Integrative Plant Science, Cornell University

Corn Silage and Grain Yield: Building a Database for NY
Dr. Quirine Ketterings and Karl Czymmek, Cornell Nutrient Management SPEAR Program & PRODAIRY

Dairy Revenue Protection
Mary Kate Wheeler, Extension Educator

Silage Trials and Corn Traits
Joe Lawrence, Forage Specialist—PRODAIRY

Herbicide Resistant Weeds to Watch For
Mike Hunter, Extension Field Crops Specialist, North Country Regional Ag Team

Investigating Health Effects of Glyphosate
Dan Wixted, PMEP - Cornell

Inside This Issue:

Is Your Farm Ready for the New Ag Labor 3
What Employers Can and Cannot Say About 4
Rate Your Record Keeping 5
Farmworker Rights & Employer Responsibilities 6-7
Dairy—Lameness, Injuries, and Lying Behavior 8
Modern On-Farm Preparedness 9
Cornell Colostrum Study Information 10
Cornell Guide for Integrated Field Crop 11
NY & Vermont Corn Silage Hybrid Eval. 11
NYCO Meetings 12
Quick Books for Farmers & Growers 12
Feed More Milk Without Scours 13
PRODAIRY Discussion Groups 14
Define Areas of Opportunity & Excellence 15
To Our Readers,

Dairy and crop farming have been on a tough road for the past several years. It seems like there may be a light at the end of the tunnel as we move into the New Year. I think it’s important to maintain hope. As we reach the end of the year it’s a habit to reflect on the past year and remember the accomplishments as well as the challenges and imagine all the improvements for the year to come. Some call that making resolutions. One thing we can count on in the New Year is continuing change. Your dairy and field crop extension team is here to help you adapt and succeed with the changes and challenges that come your way. We are always willing to listen to your challenges and concerns and can provide referrals if we can’t help directly.

My wish for you in the New Year is that you can find joy in simple things; the smile and babble of a new baby, a beautiful sunrise or a well prepared meal and the good company of family and friends especially when the road is bumpy. And in the midst of all the demands thrown at you, remember to take care of yourself. Eat and sleep well, take some down time.

Best Wishes for the New Year,

Janice and the rest of the Team

Betsy Hicks
Area Dairy Specialist
607.391.2673
bjh246@cornell.edu

Mary Kate Wheeler
Farm Business Management Specialist
509.294.6073
mkw87@cornell.edu

Fay Benson
Small Dairy Ext. Educator
607.391.2669
afb3@cornell.edu

Melanie Palmer
Ag Business Specialist
315.424.9485 Ext. 228
mjp232@cornell.edu

Donette Griffith
Main Office Administrative Assistant
607.391.2662
dg576@cornell.edu

We are pleased to provide you with this information as part of the Cooperative Extension Dairy and Field Crops Program serving Broome, Cortland, Chemung, Onondaga, Tioga and Tompkins Counties. Anytime we may be of assistance to you, please do not hesitate to call or visit our office. Visit our website: http://scnydfc.cce.cornell.edu and like us on Facebook: https://www.facebook.com/SCNYDairyandFieldCropsTeam.

The views and opinions reproduced here are those of the authors and are not necessarily those of the SCNY Area Dairy and Field Crops Team of Cornell Cooperative Extension. We strive to provide various views to encourage dialogue. The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by Cooperative Extension is implied. Permission is granted to reproduce articles from this newsletter when proper credit is given. Electronic copies are available upon request. If we reference a website that you cannot access and would like the information, contact Donette Griffith, Administrative Assistant at 607.391.2662 or by email: dg576@cornell.edu.

Janice Degni
Team Leader & Field Crops Specialist
607.391.2672
jgd3@cornell.edu

Betsy Hicks
Area Dairy Specialist
607.391.2673
bjh246@cornell.edu

Fay Benson
Small Dairy Ext. Educator
607.391.2669
afb3@cornell.edu

Mary Kate Wheeler
Farm Business Management Specialist
509.294.6073
mkw87@cornell.edu

Melanie Palmer
Ag Business Specialist
315.424.9485 Ext. 228
mjp232@cornell.edu

Donette Griffith
Main Office Administrative Assistant
607.391.2662
dg576@cornell.edu

We put knowledge to work in pursuit of economic vitality, ecological sustainability, and social well-being. We bring local experience and research-based solutions together, helping our families and our community thrive in a rapidly changing world.

Building Strong and Vibrant New York Communities

“Cornell Cooperative Extension is an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities.”
Researchers and extension educators from Cornell University Agricultural Workforce Development, Charles H. Dyson School of Applied Economics and Management, Cooperative Extension and PRO-DAIRY, have developed several tools to help New York farms manage changes to pay and overtime regulations affecting agricultural employers.

A spreadsheet to help farm managers estimate how much overtime they would have to pay under their current employee work schedules. The tool can also estimate costs of new work schedules. To use the tool, you will need to know current compensation levels and work schedules.

A new extension bulletin on “Adapting Your Labor Strategies to New York’s Revised Farm Labor Employment Laws” discusses the pro and cons of various management strategies that farm may consider in response to the new overtime rules. The guide does not make recommendations, but details the positive and negative implications of changes to work schedules, employee policies, pay rates and bonuses.

Please visit agworkforce.cals.cornell.edu/overtime to download these tools. The following is an excerpt from Cornell University Extension Bulletin 2019-06, “Adapting Your Labor Strategies to New York’s Revised Farm Employment Laws”:

Beginning January 1, 2020, New York farm employers face several major changes to the laws that govern farm employment. Labor is one of the largest inputs for most New York farm businesses and one of the most socially and ethically complex issues for managers. As a farm manager, you should consider your overall human resource management strategies and actively choose how your business will adapt to the new requirements while staying in legal compliance. The major changes to the law include:

**Overtime.** Farm employees will be eligible for overtime once they have completed 60 hours of work in a week. Overtime pay is defined as 1.5 times the “regular rate of pay.” The “regular rate of pay” includes the hourly pay rate plus any other non-discretionary2 compensation such as incentive payments. For example, a worker normally paid $12/hour plus an incentive program that adds the equivalent of another $1/hour would have a regular rate of pay of $13/hour and would go to $19.50/hour overtime rate for hours worked beyond 60 inside a week. Immediate family members (parent, spouse, child) of the farm owners are exempt from the overtime requirement. Some other employees may be exempt from overtime. Please refer to other resources.

**Weekly Day of Rest Requirement.** The new law stipulates that farm employers must offer employees at least 24 consecutive hours of rest in each and every calendar week (Sunday–Saturday). This day of rest should be on the employee’s day of religious observance whenever possible, but it can move to another day in the week if crop or weather conditions prevent work. Employees can voluntarily waive their day of rest and choose to work, but employers would have to pay the overtime rate (1.5 times the regular rate of pay) for every hour they worked on their day of rest, regardless of how many hours they had worked that week.

**Collective Bargaining.** Farm employees will have the right to form a labor union and collectively bargain with their employer to create an agreement that will set terms and conditions of employment. If employees choose not to form a union on a given farm, then this new law has no meaningful effect. However, if a union is formed and a collective bargaining agreement goes into effect, then that agreement will set the new labor costs and rules under which that individual farm will need to operate.

A few minor changes will also affect some farms:

**Workers’ Compensation and Unemployment Insurance.** These benefits were already required for most farm employees, but the law now removes exemptions for small farm employers.

**Disability Insurance and Paid Family Leave.** Farm employers will now be defined as regular employers in New York. As such, they are required to provide disability insurance and paid family leave for all employees. These items have relatively minor financial impact on farm businesses and can be partially offset with deductions from employee pay.
New York farm employees will have the right to organize in unions and collectively bargain under the state’s new farm labor law that takes effect January 1, 2020. Farm employers need to understand that in an environment where employees may try to organize there are some special rules about what employers can and cannot say or do about unions. State and federal laws identify these activities as “unfair labor practices” and they may apply to employers, unions, or to employees.

The new law permitting farm employee unions is a state law and will be administered by the NY Public Employee Relations Board (PERB). The new law has a clause in it that says: “It shall be an unfair labor practice for an agricultural employer to discourage union organization or to discourage an employee from participating in a union organizing drive, engaging in protected concerted activity, or otherwise exercising the rights guaranteed under this article.” It remains to be seen how strictly the state will interpret and enforce this clause.

Most unions are governed by a federal law called the National Labor Relations Act (NLRA). We won’t know with certainty exactly how the state will administer the new state law until it’s been in place for a few years, but we can take some general guidance from how the federal law is administered. As always, this is general guidance for educational purposes, not specific legal advice. You should seek competent legal counsel if you have specific questions about union organizing activities and your management response to it.

Two acronyms, TIPS and FOE give employers general guidance about what they can and cannot say or do during a union organizing effort. Again, these are based on federal labor law.

T-I-P-S covers what employers cannot say or do:

**T is for Threats.** Employers cannot threaten employees with consequences if they support or vote for the union. Employers can’t discipline, terminate, reduce benefits, or take other adverse action against employees because they support a union.

**I is for Interrogate.** Employers are not allowed to ask employees questions about the organizing effort, what they think about it, or the names of employees who support the union or attend meetings.

**P is for Promise.** Employers cannot promise pay increases, greater benefits, promotions or other valuable items in exchange for keeping the union out.

**S is for Surveillance.** Using spies (whether employees or not), video cameras, or taking photos of people attending a union meeting are all banned as surveillance.

Of course, farm employers have free speech rights under the First Amendment to the U.S. Constitution. F-O-E outlines the things that employers can say during a union organizing effort.

**F is for Facts.** Employers can share factual information about the union organizing process and potential collective bargaining process, and other matters such as union dues. They can talk about real, verifiable facts about the financial condition of the business and the industry and implications for employee compensation and benefits. They can also talk about how relationships between management and employees will change if a business becomes a union environment.

**O is for Opinions.** Employers can make clear their own personal opinions about a union, whether supportive or against. If an employer expresses an opposing opinion, it is important that it not be delivered as a threat. If an employer says to employees during the organizing process: “I’m not in favor of a union and I do not think it is the best thing for our business,” this may or may not be an unfair labor practice, depending on the context and whether it could be received as a threat. If the employer adds to this statement, “but I will respect the law,” then it would most likely not be an unfair labor practice.

**E is for Examples.** Employers are allowed to share specific examples such as actual union contracts that have been negotiated, news reports of other union activities, or examples of current results from managers and employees working together directly.

It is important to note that the NY state farm labor law specifically identified a few other unfair labor practices:

Farm employees or unions are not allowed to strike or otherwise slow down farm work. Farm employers are not allowed to “lockout” or prevent employees from working as a result of a contract dispute.
Have you ever heard the business adage: “You can’t manage what you don’t measure?” When it comes to the financial side of your farm business, good record keeping is the first step to measuring — and managing — business performance.

Good financial record keeping takes time, discipline, organization, and often teamwork. For some farms, it may also require investing in accounting software, or hiring a professional bookkeeper. In other words, you have to commit resources to this effort, and the commitment must be ongoing. However, with all of the day-to-day production activities demanding attention from the farm operator, it can be easy to lose track of that commitment.

If the benefits of good record keeping are not enough to convince you that the effort is worthwhile, then consider the costs of poor record keeping. In my experience, farms with inadequate financial record keeping systems face three major costs: wasted time, missed opportunities, and high stress. While it may be difficult to quantify these costs, they are very real. When you spend hours searching for a lost bill or receipt, incur service fees due to a missed payment, or overlook an opportunity to increase profits, both your financial bottom line and your mental health can suffer.

What makes a good record keeping system, and how do you know if you already have one or not? This short quiz can help you answer both of these questions. The five quiz questions encourage you to reflect on attributes of your current record keeping system. Keep track of your points to see how your system ranks, and what you can do to improve it, in the scoring section following the quiz.

**Rate Your Record Keeping Quiz**

1. On my farm, records of individual income and expense transactions are:
   - Regularly entered into an accounting system before going into organized storage (3 points)
   - Organized, stored in a specific location, easy to find (2 points)
   - Disorganized, stored in multiple locations, hard to find (1 point)

2. Which statement best describes the accounting system used to enter and track financial data on your farm?
   - We regularly enter financial transactions into a digital accounting program — e.g. QuickBooks, CenterPoint, Quicken, etc. (4 points)
   - We regularly enter financial transactions using a simple accounting tool — e.g. Cornell Farm Account Book, Excel spreadsheet, etc. (3 points)
   - We use checking account statements as the primary record of financial transactions — e.g. the digital shoebox method (2 points)
   - We collect paper receipts and hand them over to an off-farm accountant at the end of the year — e.g. the shoebox method (1 point)

3. Who is responsible for financial record keeping on your farm?
   - One person is responsible, and that person sets clear expectations for other team members (3 points)
   - Multiple people share responsibility, and their roles are not clearly defined (2 points)
   - Nobody (1 point)

4. Which statement best describes the income tax situation on your farm?
   - The farm completes income tax returns on a timely basis (3 points)
   - We are still working on last year’s taxes (2 points)
   - Our farm is more than a year behind on filing income taxes (1 point)

5. Our farm generates and uses financial statements to analyze business performance:
   - Regularly, on a monthly or quarterly basis (4 points)
   - Regularly, on an annual basis (3 points)
   - Only when our lender requires it (2 points)
   - Not at all (1 point)

**Interpret Your Score**

5 - 9 points: Poor

Your record keeping system is inadequate. It may be costly in terms of high stress, inefficient labor, and missed opportunities. Your farm desperately needs someone to make a commitment to take your system to the next level. To set up a basic system, you will need to identify who, what, when, where and how. Who will be responsible for organizing records and entering transactions? What categories will you track for revenues, expenses, and other transaction types? When will your designated bookkeeper complete their record keeping activities? Where will records be stored, whether in digital or print format? What accounting tool will you use to record transactions? If you are more than a year behind on your record keeping, you may consider using a simple accounting tool to catch up quickly, while putting a more sophisticated tool into place for future years.

10 - 14 points: Adequate

You have a basic record keeping system in place, which most

*Continued on page 10*
UPDATES TO
FARMWORKER RIGHTS AND EMPLOYER RESPONSIBILITIES
WE ARE YOUR DOL

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>12/31/19</th>
<th>12/31/20</th>
<th>2021*</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York City</td>
<td>$15.00</td>
<td>$15.00</td>
<td>$15.00</td>
</tr>
<tr>
<td>Long Island and Westchester</td>
<td>$13.00</td>
<td>$14.00</td>
<td>$15.00</td>
</tr>
<tr>
<td>Remainder of New York State</td>
<td>$11.80</td>
<td>$12.50</td>
<td>*</td>
</tr>
</tbody>
</table>

*Annual increases for the rest of the state will continue until the rate reaches $15 minimum wage (and $10 tipped wage). Starting 2021, the annual increases will be published by the Commissioner of Labor on or before October 1. They will be based on the percentage increases determined by the Director of the Division of Budget, based on economic indices, including the Consumer Price Index.

EFFECTIVE JANUARY 1, 2020:
WAGES AND OVERTIME
All farmworkers, including Foreign Visa workers, must now be paid one and a half times the regular rate of pay for hours worked over 60 in a calendar week. For more information, please contact the NYS Department of Labor at 833-NY-FARMS (833-693-2767) or www.labor.ny.gov/FarmLabor.

DAY OF REST
Employers must provide at least one day (24 consecutive hours) of rest in every calendar week. The employer must designate, and notify the worker in advance of, their day of rest and, whenever possible, ensure that the day off coincides with a traditional day for religious worship. Farmworkers are permitted to voluntarily work on the day of rest, provided the employer pays them at the overtime rate. Employers must keep a weekly record of hours and days worked. For more information, please contact the NYS Department of Labor at 833-NY-FARMS (833-693-2767) or www.labor.ny.gov/FarmLabor.

UNEMPLOYMENT INSURANCE
Farm employers, and farm crew leaders under certain conditions, are required to provide unemployment insurance coverage for their employees. H-2A Foreign Guest Workers are excluded from unemployment insurance coverage. For more information, please contact the NYS Department of Labor at 888-899-8810.

WORKERS’ COMPENSATION
Farm employers, owners and operators are required to provide workers’ compensation coverage for their employees, regardless of their annual payroll, and all employers are required to post the mandatory workers’ compensation notice of compliance poster in both English and Spanish. Additionally, farm labor contractors, forepersons and supervisors who receive notice of an injury must notify the employer, owner or operator of the farm where the injury occurred, and employers are prohibited from discriminating against farm laborers who request workers’ compensation claim forms. For more information, please contact the Workers’ Compensation Board at 877-632-4996 or www.wcb.ny.gov.

DISABILITY INSURANCE AND PAID FAMILY LEAVE
Farm employers, owners and operators are required to provide New York’s disability benefits (DB) and Paid Family Leave (PFL) insurance coverage to eligible farm laborers. See PaidFamilyLeave.ny.gov for information on PFL employee eligibility and opt-out waivers that employers must give to those who qualify. All employers are prohibited from discriminating against employees who request DB or PFL claim forms. For more information, please call 844-337-6303. For more information and employer resources related to workers’ compensation, disability benefits and paid family leave, please see the Workers’ Compensation Board’s Toolkit for Farm Employers at www.wcb.ny.gov/farmtoolkit.

RIGHT TO ORGANIZE
Farmworkers possess the right to organize, which includes forming, joining, or assisting labor organizations, and the right to bargain collectively through representatives of their own choosing. This includes the right to engage in concerted activities (any activity, discussion, or meeting directed at improving terms and conditions of employment, or the group interests of employees), for the purpose of collective bargaining or other mutual aid or protection, free from interference, restraint, or coercion of employers. However, farmworkers do not have the right to strike. Farmworkers are protected from retaliation, including termination, if they are speaking to each other about labor conditions and organizing. For more information, please contact the Public Employee Relations Board at 518-457-6410 or see perb.ny.gov.

EFFECTIVE JANUARY 1, 2021:
MIGRANT FARMWORKER HOUSING PERMIT
Employers are required to contact the NYS Department of Health (or local County Health Department) and apply for a permit to operate a farm or processing labor camp which will be occupied by one or more migrant workers. For information on the permitting process, please contact the NYS Department of Health at 518-402-7600. Find your county health department at www.health.ny.gov/contact/contact_information/
ACTUALIZACIONES DE
DERECHOS DE TRABAJADORES AGRÍCOLAS
Y RESPONSABILIDADES DEL EMPLEADOR
WE ARE YOUR DOL

<table>
<thead>
<tr>
<th>LUGAR</th>
<th>12/31/19</th>
<th>12/31/20</th>
<th>2021*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ciudad de New York</td>
<td>$15.00</td>
<td>$15.00</td>
<td>$15.00</td>
</tr>
<tr>
<td>Long Island y Westchester</td>
<td>$13.00</td>
<td>$14.00</td>
<td>$15.00</td>
</tr>
<tr>
<td>Resto del Estado de Nueva York</td>
<td>$11.80</td>
<td>$12.50</td>
<td>*</td>
</tr>
</tbody>
</table>

*Los aumentos anuales para el resto del estado continuarán hasta que la tasa alcance un salario mínimo de $15 (y $15 de propina). Comenzando en 2021, los aumentos anuales serán publicados por el Comisionado del Departamento de Trabajo el o antes del 1 de octubre. Se basarán en los aumentos del porcentaje determinado por el Director de la División de Presupuesto, en base a índices económicos, incluido el índice de Precios al Consumo.

A PARTIR DEL 1 DE ENERO DE 2020:
SUELDOS Y HORAS EXTRAS
A todos los trabajadores agrícolas, incluidos los trabajadores extranjeros con Visa, ahora se les deberá pagar una vez y media la tarifa regular de pago por más de 60 horas trabajadas durante una semana. Para obtener más información, comuníquese con el Departamento de Trabajo del Estado de Nueva York al 833-NY-FARMS (833-693-2767) o www.labor.ny.gov/FarmLabor.

DÍA DE DESCANSO
Los empleadores deben otorgar al menos un día (24 horas consecutivas) de descanso en cada semana calendario. El empleador debe designar, y notificarle al empleado de antemano, su día de descanso y, siempre que sea posible, asegurarse de que el día de descanso coincida con un día tradicional de culto religioso. Los trabajadores agrícolas tienen permiso para trabajar de manera voluntaria durante el día de descanso, si el empleador les paga la tarifa de horas extras. Los empleadores deben llevar un registro de horas y días trabajados. Para obtener más información, comuníquese con el Departamento de Trabajo del Estado de Nueva York al 833-NY-FARMS (833-693-2767) o www.labor.ny.gov/FarmLabor.

SEGURO DE DESEMPLEO
Se les exige a los empleadores agrícolas, y dirigentes campesinos bajo ciertas condiciones, que otorguen cobertura de seguro de desempleo a sus empleados. Los trabajadores extranjeros invitados del programa H-2A están excluidos de la cobertura del seguro de desempleo. Para obtener más información, comuníquese con el Departamento de Trabajo del Estado de Nueva York al 888-899-8810.

INDEMNIZACIÓN LABORAL
Se les exige a los empleadores agrícolas, propietarios y operarios que proporcionen indemnización por incapacidad laboral del trabajador, independientemente de su nómina salarial anual y todos los empleadores deben publicar el aviso de indemnización del trabajador tanto en inglés como en español. Además, los contratistas rurales, encargados y supervisores que reciben aviso de una lesión deben notificar al empleado, propietario u operario del campo dónde ocurrió la lesión y los empleadores tienen prohibido discriminar a los trabajadores agrícolas quienes solicitan los formularios de reclamo de la indemnización. Para obtener más información, comuníquese con la Junta de Indemnización de Trabajadores al 877-633-4996 o www.wcb.ny.gov.

SEGURO POR DISCAPACIDAD Y BAJA FAMILIAR REMUNERADA
Se les exige a los empleadores agrícolas, propietarios y operarios que otorguen los beneficios de discapacidad de Nueva York (DB, por sus siglas en inglés) y el seguro de ausencia familiar pagado (PFL, por sus siglas en inglés) para los trabajadores agrícolas elegibles. Ver PaidFamilyLeave.ny.gov para obtener información sobre la elegibilidad del empleado por PFL y exenciones de exclusión que los empleadores deben darle a quienes califican. Se les prohíbe a todos los empleadores discriminar a los empleados que solicitan los formularios de reclamo de DB o PFL. Para obtener más información, llame al 844-337-6303. Para obtener más información y recursos del empleador relacionados con la indemnización de los trabajadores, los beneficios por discapacidad y ausencia familiar pagada, lea el material de la Junta de Indemnización de los Trabajadores para los empleadores agrícolas en www.wcb.ny.gov/farmToolkit.

DERECHO A ORGANIZAR
Los trabajadores agrícolas poseen el derecho a organizarse, lo que incluye afiliarse o ayudar a las organizaciones sindicales y el derecho a negociar colectivamente mediante representantes de su elección. Esto incluye el derecho a comprometerse en actividades concertadas (cualquier actividad, discusión o reunión dirigida a mejorar términos y condiciones de empleo, o los intereses del grupo de empleados), con el motivo de negociación colectiva u otra ayuda o protección mutua, libre de interferencia, restricción o coerción de empleadores. Sin embargo, los trabajadores agrícolas no tienen el derecho de hacer huelga. Los trabajadores agrícolas están protegidos de represalias, incluido el despido, si hablan entre sí sobre las condiciones de trabajo y organización. Para obtener más información, comuníquese con la Junta de Relaciones de Empleado público al 518-457-6410 o visite perb.ny.gov.

A PARTIR DEL 1 DE ENERO DE 2021:
PERMISO DE ALOJAMIENTO PARA TRABAJADORES AGRÍCOLAS MIGRANTES
Se les exige a los empleadores que contacten al Departamento de Salud del Estado de Nueva York (o Departamento de Salud del Condado local) y soliciten un permiso para manejar un campo o campamento de trabajadores agrícolas que será ocupado por uno o más trabajadores migrantes. Para obtener más información, comuníquese con el Departamento de Salud del Estado de Nueva York al 518-402-7600. Encuentre a su departamento de salud del condado en: www.health.ny.gov/contact/contact_information/
Several studies have been completed in the US looking at freestall cow comfort, but very little work has been done focusing on lameness, injuries, and lying behavior on tiestall dairies in New York. With about 25% of the dairy cattle in the US, and lameness being one of the costlier issues impacting dairies, a recent Cornell Cooperative Extension research project aimed to fill this gap and provide farmers with valuable farm-specific data.

Dairy Specialists from the North Country Regional Ag Team and the South Central NY Dairy and Field Crops Team secured two rounds of funding from the New York Farm Viability Institute. A total of 22 tiestall dairies (11 in Northern NY and 11 in South Central NY) were enrolled, and data was collected during the summer of 2017 and the summer of 2018. Each herd was visited at least twice to collect the management and facilities data and the animal-based measures. On each farm, 8-9 random stalls throughout the barn were assessed for stall dimensions, bedding amount, and bedding cleanliness. Forty random cows were assessed on each farm for injuries (hock, knee, and neck), lameness, BCS, hygiene, and lying behavior. After the on-farm assessment, each farm received a report highlighting their summarized data, how they compared to the benchmark of the 22 participating farms, and some strengths and areas of opportunity were identified. After 6-12 months, dairies were visited again, and if there were any management or facility changes, a reassessment was completed, and improvements were documented.

Overall, most dairies had stalls that were too small based on their cow size. Only 4 of the 22 herds met the requirements for stall length, 11 dairies met the requirement for stall width, and only 2 had a tall enough tie rail (Figure 1 and Figure 2).

Overall, there were large differences from herd to herd in lameness, injury prevalence, and lying behavior (Figure 3).

In most cases, farms that did not meet stall recommendations on a certain dimension or practice commonly had injuries correlating to that stall recommendation. For instance, herds that had too aggressive of a tie rail often had a high prevalence of neck injuries. Herds that used less bedding often times had higher rates of hock injuries.

Even though most dairies did not meet recommendations for stall size, the farm’s management of stalls and cows often was able to overcome, or at least counteract, the pitfalls of poor stall design. Some farms that lacked a soft mattress added more bedding to stalls to help cushion the surface, or lengthened the tie chain to give cows more freedom of movement while tied. Others utilize an exercise yard or pasture daily so that cows can move about, minimizing joint stiffness and helping mobility.

Perhaps the most interesting data that herds received was related to lying behavior on their farm. Some herds had already retrofitted a portion of their barn, and wanted to compare lying times to original stalls. Some herds wanted to compare pasture lying times with winter (barn) lying times. Others even used the data to determine that one end of the barn was more comfortable than another and made changes accordingly.

In all, properly sized stalls and good management of cows and stalls are pillars of cow comfort. Increasing cow comfort increases productivity of the herd, and can increase a cow’s longevity in the herd. All of these things positively impact profitability of the dairy. A whole-system approach to cow comfort will bring about the most impactful changes: increasing management skills, access to pasture, focusing on heat abatement, and stall renovations will all help cow comfort. There is no “cookie-cutter” solution. Changes can be extensive or low-cost; both will help a dairy achieve their goals of improved cow comfort and profitability.

—Figures 2 and 3 continued on page 15

### Figure 1. Measurements (inches)

<table>
<thead>
<tr>
<th>Herd Average</th>
<th>Cow</th>
<th>Stall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rump Height</td>
<td>Hook Width</td>
</tr>
<tr>
<td>Average</td>
<td>58.6</td>
<td>23.8</td>
</tr>
<tr>
<td>Minimum</td>
<td>52.5</td>
<td>19.2</td>
</tr>
<tr>
<td>Maximum</td>
<td>62.4</td>
<td>25.9</td>
</tr>
</tbody>
</table>
Webinars can be accessed at the local site or signed in anywhere from a mobile device or computer.

Six consecutive Thursday afternoons: January 23 - February 27. Attend all sessions or individual sessions.

Registration is $10 per session or $50 for all six sessions.

Presenting organizations:
Cornell Cooperative Extension, NY State Cattle Health Assurance Program, American Dairy Association, and New York Center for Agriculture and Health.

Information on locations and registration:
Visit our website to register and for more information at https://scnydfc.cce.cornell.edu/events.php

Questions: Betsy Hicks | bjh246@cornell.edu | 607-391-2673
Registration: Donette Griffith | dg576@cornell.edu | 607-391-2662

DATES AND LOCATIONS
Jan 23 - Preparedness for Urgent Situations. Be prepared for a fire, weather emergency or barn damage.
Cuyler Fire Department 1 - 4 pm.

Jan 30 - F.A.R.M 4.0 Update. The F.A.R.M program is evolving as farmers implement the program. Learn about how farmers have used and gained benefits and how you can use the FARM program.
Webinar & Discussion: 1 - 2 pm.
Broadcasts: Farm Credit East in Homer & CCE Tioga

Feb 6 - Activist Preparedness. This session will address several aspects of dealing with activists, including good hiring practices, available resources for support, and a plan of who to contact if something happens on your farm. Learn how to talk about videos taken on another farm and how to prepare your employees for these events.
Webinar & Discussion: 1 - 2 pm.
Broadcasts: Farm Credit East in Homer & CCE Tioga

Feb 13 - Social Media Preparedness. How to respond to negative comments on farm pages. Resources to tap into and people you can call for effective responses.
Farm Credit East 1 - 4 pm.

Feb 20 – Disease Outbreaks and Biosecurity. Do you have a plan in place if there is a disease outbreak on the farm? Dr. Melanie Hemenway, State Veterinarian, will provide concrete steps to deal with disease outbreaks and make biosecurity recommendations for prevention.
Webinar: 1 - 2 pm.
Broadcasts: Farm Credit East in Homer & CCE Tioga

Feb 27 - On Farm Safety-Prevention, Prevention, Prevention. Yet accidents still happen. This session will focus on prevention and also address accident response.
E-Z Acres in Homer: 1 - 4 pm.
Cornell Colostrum Study Information Sheet

The title of the study is “The effect of season as well as dry period management and nutrition on colostrum quality and quantity”. The project is led by Dr. Sabine Mann and Dr. Tom Overton.

The purpose of the study is to investigate management, nutritional, and metabolic factors that affect colostrum quality/quantity, and thereby success of transfer of passive immunity to calves.

Samples obtained from animals
The study will have 4 visits over a 12-month period. Study staff plans lock-up and sample up to 36 adults in the prepartum and postpartum cohort, as well as up to 12 calves 1-7 days of age, per visit. Blood samples will be taken from the tail of adult animals (20 mL) and from the jugular vein of calves (10 mL). Visual body condition scores will be recorded for all adult animals. No substances will be administered to animals.

Enrollment Criteria
1. Ability to collect individual colostrum weight or volume and take a composite sample of colostrum for Brix reading
2. Record the weight/volume and Brix reading on individual cow’s colostrum (Misco Brix refractometer and record binder will be given to the farm)
3. Minimum of approximately 500 with preference of 1,000+ lactating cows
4. Headlocks in pre-fresh and fresh pen

Other Study Activities
1. Complete a herd questionnaire describing management of dry cow management, calving practices, and colostrum management
2. Allow study personnel to visit your farm four times to obtain animal samples as specified above, feed samples, body condition score enrolled animals, and retrieve rations, feed mixes, and records
3. Allow us to access DC305 records.
4. Allow us to contact your nutritionist to inquire about formulated rations for dry and fresh cows.
5. Allow us to hang two small environmental sensors to collect environmental temperature, relative humidity, and light
6. Share data on dry matter intake in dry cow/heifer and fresh cow/heifer pens.
7. Allow digital pictures to be taken and used in anonymized form.

Results
Data will undergo statistical analysis to make general as well as farm specific recommendations to be shared with participating farms on improving colostrum quality and quantity. Study results anonymized from participating farms will be published in popular press articles, peer-reviewed journals and will be presented at national conferences. Visit BHB results can be shared with producer shortly after visit.

If Interested
If interested, please contact Trent Westhoff at taw96@cornell.edu or inform Betsy Hicks, Margaret Quaassdorff, Charlene Ryan, Casey Havekes, Tom Overton, or Sabine Mann. Farm enrollment begins October 1, 2019 and will continue until 21 herds are enrolled.

Record Keeping —Continued from page 5
likely satisfies the IRS and your banker, and helps with farm decision making. However, your system may not provide enough detail or accuracy to analyze your farm’s financial performance. It is time to ramp up your record keeping game, and build a system that creates more value for your business. Do you have the in-house capacity to manage a sophisticated record keeping system? If so, invest in training for whoever on the farm is responsible for record keeping. Explore different accounting software packages, and discuss their pros and cons with your tax accountant and your lender. Select a record keeping software that works for you, one that is simple enough for your on-farm bookkeeper to learn and manage, yet sophisticated enough to analyze data and generate financial reports. If you do not have a person on the farm who can provide leadership for a record keeping transition, consider hiring an outside bookkeeper to enter transactions on a weekly or monthly basis.

15 - 17 points: Rock Solid
You have reliable numbers to support detailed financial analysis. You can plan and make management decisions with confidence. Once your record keeping system reaches this level, you can shift your focus from data tracking to analysis. At this point, you should have a strong foundation for whole farm budgeting and strategic business planning. Be sure to set clear financial goals and review your profitability on a regular basis, whether monthly, quarterly or annually. Consider benchmarking your financial performance against other farms in your industry to identify opportunities for improvement. The agricultural extension program in your state can help you locate benchmarking resources for your industry. Ultimately, your farm will benefit from your ability to evaluate financial impacts of possible changes, and plan for the future of your business. Depending on where you are in the lifecycle of your business, it may be time to start developing a farm succession plan. ★
**Field Crop News**

**2020 Cornell Guide for Integrated Field Crop Management Now Available**

The Pesticide Management Education Program (PMEP) at Cornell University is pleased to announce the availability of the **2020 Cornell Guide for Integrated Field Crop Management**.

Written by Cornell University specialists, this publication is designed to offer producers, seed and chemical dealers, and crop consultants practical information on growing and managing field corn, forages, small grains, and soybeans. Topics covered include nutrient management, soil health, variety selection, and common field crop pest concerns. A preview of the Field Crops Guide can be seen online at https://cropandpestguides.cce.cornell.edu.

Highlighted changes in the **2020 Cornell Field Crops Guide** include:
- Revised pesticide options for economically important field crop pests.
- Updated corn, forage, and small grain variety trial and research data.
- Pesticides available for stored grain management.

Cornell Crop and Pest Management Guidelines are available as a print copy, online-only access, or a package combining print and online access. The print edition of the **2020 Field Crops Guide** costs $31 plus shipping. Online-only access is $31. A combination of print and online access costs $43.50 plus shipping costs for the printed book.

Cornell Guidelines can be obtained through your local Cornell Cooperative Extension office or from the Cornell Store at Cornell University. To order from the Cornell Store, call (844) 688-7620 or order online at https://www.cornellstore.com/books/cornell-cooperative-ext-pmep-guidelines.

**New York & Vermont Corn Silage Hybrid Evaluation Program**

**By Janice Degni, Field Crop Specialist - SCNY Dairy & Field Crop Team**

In 2019, the corn silage hybrid evaluation program received 75 entries from 14 seed brands. Hybrid evaluation at multiple environments helps in decision making and expands the reach of this type of data to more farmers. With this in mind Cornell, UVM, and seed companies collaborate to provide this robust evaluation. Hybrids were either entered into the 80-95 day relative maturity (RM) group (Early-Mid) and were tested at two locations in NY or were entered into the 96-110 day relative maturity group (Mid-Late) and were tested at two locations in and one location in VT. Weather data, growing degree days and precipitation, both for the current year and long term averages, can be found in Tables 1a and 1b for trial locations.

Growers can use this performance data to better understand how a hybrid performs under a diverse set of environments. From this, you can compare to your own yearly performance to better understand if a hybrid may be a good fit for your farming conditions.

Just as the weather in 2019 was somewhere in between the extremes of 2017 and 2018, the forage quality characteristics of the crop also rank somewhere between 2017 and 2018. Based on these results, where corn was able to properly mature for silage, it can be expected that it will offer a better feed quality than 2017 but may not reach the potential of 2018 corn silage.

Here is a link to the 2019 report. [https://blogs.cornell.edu/varietytrials/corn-silage/](https://blogs.cornell.edu/varietytrials/corn-silage/)

The NY and VT corn silage evaluation program is made possible with support from dairy producers, participating seed companies, Cornell University, the University of Vermont, the New York Corn Growers Corn Research and Education Program, the Northern New York Agricultural Development Program, and the Cornell Agricultural Experiment Station. Seed companies were invited to submit hybrids into either maturity group (three locations per maturity group) for a fee.
New York Certified Organic (NYCO) has announced a new location for its 2020 meeting series. Martin Auction Barn, 1036 NY Route 318, Waterloo, NY, will host the meetings while the auditorium at Cornell AgriTech in Geneva is renovated. All those interested in organic production are welcome.

The 2020 meetings will be held on January 14, February 11, and March 10. All meetings start at 10 am. There is no charge to attend; please bring a dish to pass or a donation for the potluck lunch.

January 14, 2020 speakers include organic grain growers and processors, John and Halee Wepking of Meadowlark Organics Farm, Ridgeway, WI; Dr. Margaret E. Smith of the Cornell University Department of Plant Breeding and Genetics; and a panel of dairy farmers Kirk Arnold, Ryker Smith, and Jeremy Mapstone discussing forage harvesting and storage under inconsistent weather.

The Wepking’s story is unique in that they are new to farming, having met as chefs in New York City, deciding they wanted to grow the food they worked with, and how they landed in Ridgeway, Wisconsin. They were attracted to an advertisement by retiring dairy farmer Paul Bickford who wanted to transition his 950-acre farm into a diversified enterprise by reaching out to young farmers. John and Halee will share some of the challenges and benefits of getting started in this manner and how they added value to their grain crops by starting a flourmill. Paul Bickford will join the discussion by phone to answer questions about his model of transitioning from a moderately-sized commodity farm to a diversified enterprise. For a preview, see the video online at: https://vimeo.com/211021158.

Cornell University plant breeder and researcher Dr. Margaret Smith will review her work and that of others on developing crop varieties whose physiologies are best adapted to organic management. Her work includes growing foundation seed and providing farmers with tools to make wise seed choices.

Kirk Arnold of Twin Oaks Dairy in Truxton, NY; Ryker Smith of Tre-G Farms, Manlius, NY; and Jeremy Mapstone of Pastureland Dairy, Manlius, NY; will review the plans they have developed to get consistently good forage harvested and stored during these times when the weather is anything but consistent.

Visit the website http://blogs.cornell.edu/organicdairyinitiative/ for details on the February and March meetings.

NYCO meetings are free; no registration needed to attend. For more information, contact NYCO Meeting Coordinator Fay Benson with Cornell Cooperative Extension’s South Central New York Dairy and Field Crops Team at afb3@cornell.edu or 607-745-3807. The 2020 NYCO meetings were planned with the help of Emily Reiss, Ph.D., with the Crop Team at Kreher Family Farms, Clarence, NY, and Luke Gianforte of Gianforte Farm, Cazenovia, NY.

Quick Books for Farmers & Growers

This is a beginner level class is for farm bookkeepers who want to improve financial record keeping, figure out whether QuickBooks software is a good fit for their business, or enhance their QuickBooks skills. In this 4-part series, you will learn how to set up and use QuickBooks from the ground up. The course covers:

- Basic accounting concepts and reports,
- How to set up a Chart of Accounts to fit your farm operation
- Invoicing and Cash Receipts
- Recording and Paying Purchases and Expenses
- Reconciling Accounts
- Production and Analysis of Financial Statements

This class covers the desktop version of QuickBooks. We provide laptops with QuickBooks 2018, if you do not have one. (Sorry, no Apple or Cloud versions allowed.)

After completing the course, students may schedule a free individual follow-up session with a CCE educator or a volunteer mentor through the SCORE business network. Don’t miss this workshop! Space is limited, so register now.

Location:
Cortland Career Work Center
99 Main St, Cortland, NY 13045

Dates: January 15, 22, 29 & February 5, 2020
Time: 10am-12pm
Cost: $95.00 per farm

Host: SCNY Dairy & Field Crops
Mary Wheeler mkw87@cornell.edu

To register online: https://scnydfc.cce.cornell.edu/event_preregistration.php?event=1053

FMI: Visit our webpage at https://scnydfc.cce.cornell.edu/event.php?id=1053 or call 509.294.6073
Cold weather arrives. You decide to feed more milk/milk replacer. Soon after making the change your treatable scours rate goes up too much to be acceptable.

What are the differences among farms that have this problem and those that feed milk/milk replacer at higher volumes without diarrhea issues among young calves?

### The most common differences

<table>
<thead>
<tr>
<th>Low Scours Rate</th>
<th>High Scours Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Milks fresh cows as soon as possible after calving, nearly all of them within 6 hours post-calving.</td>
<td>1. Milks fresh cows next regularly scheduled milking.</td>
</tr>
<tr>
<td>2. Checks colostrum and uses highest quality for first feeding.</td>
<td>2. Does not check colostrum quality.</td>
</tr>
<tr>
<td>3. Feeds colostrum as soon as possible after birth, always within the first 4 hours.</td>
<td>3. Feeds colostrum at next regular calf feeding time.</td>
</tr>
<tr>
<td>4. Feed 3.5-4 quarts colostrum (large breeds)</td>
<td>4. Feeds 1.5-2 quarts of colostrum.</td>
</tr>
<tr>
<td>5. Checks colostrum cleanliness with regular culturing.</td>
<td>5. Does not check colostrum for bacteria content.</td>
</tr>
<tr>
<td>6. Checks for successful passive transfer of immunity on a regular basis.</td>
<td>6. Checks for successful passive transfer of immunity only if there is a “problem.”</td>
</tr>
<tr>
<td>7. Cleans colostrum and milk handling equipment after use following an accepted cleaning protocol that is written and posted.</td>
<td>7. Cleans colostrum and milk handling equipment as convenient with no regular protocol.</td>
</tr>
<tr>
<td>8. Checks milk or milk replacer cleanliness with regular culturing.</td>
<td>8. Does not check milk or milk replacer for bacteria content.</td>
</tr>
<tr>
<td>9. Feeds preweaned calves enough milk or milk replacer to support at least 1 pound a day gain all seasons of the year.</td>
<td>9. Feeds preweaned calves milk or milk replacer at a rate such that calves do not gain weight some seasons of the year.</td>
</tr>
</tbody>
</table>

### How Realistic is it to try Feeding at a Higher Volume?

Following all the practices in the left-hand column above does not guarantee that none of your calves will have scours. In contrast, the chances for scours do go up as your practices look more and more like the ones in the right-hand column.

Feeding calves is always like walking a tight-rope. You are trying to maintain a balance. As you increase milk or milk replacer feeding volumes the chances of losing your balance go up. That is, the calves have diarrhea. This requires better management skills.

### Key Skills:

- Be able to feed different volumes of milk to calves – not every calf receives the same amount. While there are a few exceptions most calf feeding programs that feed more than the traditional 2 quarts twice daily increase volume as calves grow. Lots of folks mark individual or groups of pens to receive a specific amount per feeding.

- Be able to feed consistent volumes of milk. This means delivering each feeding within 1 cup of the intended volume. For example, when feeding 3 quarts at 1 feeding the actual amount delivered does not vary more than 2.75 to 3.25 quarts.

- Be able to deliver milk replacer mixed at the same concentration at every feeding. A significant step in achieving this consistency is having an accurate set of scales that are used all the time to measure milk replacer powder.

- Be able to deliver milk or milk replacer at the same temperature at every feeding. My goal is to achieve delivery temperatures in the range of 100-105°F. In cold weather conditions this may mean delivering liquid feeds in multiple batches.

- Be able to observe and diagnose scours in calves. Prompt diagnosis and treatment is always important. Equally important is watching a group of calves the first few days after their ration has been bumped up in volume.

Many folks have observed that it is a good practice to temporarily drop back volume fed for a few days when a calf scours after a ration increase. My personal experience suggests that at least 1 out of 20 calves will experience what is often called “nutritional” scouring even when volume increases are as small as 0.5 quart per feeding.

Sam Leadley, Calf & Heifer Management Specialist
smleadley@yahoo.com
www.atticacows.com
For Calves with Sam blog go to dairycalfcare.blogspot.com
Attica Vet. Assoc. 2019 All Rights Reserved.
HERD RECRUITMENT FOR DISCUSSION

SCNY Dairy & Field Crops Team

**DISCUSSION GROUP DETAILS:**
- Meeting in February 2020 with all farms
- Enrollment in Dairy Profit Monitor
- Monthly assistance in record keeping and DPM
- Meeting in January 2021 with all farms
- Reimbursement of DPM fee to farms that complete 9 months of DPM

**HERD ELIGIBILITY:** Herd must agree to the above discussion group details * Herd should be less than 120 lactating cows *
Herd does not utilize herd record keeping software such as Dairy Comp or PCDart, but can use test-day data * Herd does not complete a Dairy Farm Business Summary * Farm is given the first three month of DPM free, annual fee is reimbursed after nine months of data is compiled at the second group meeting

**QUESTIONS and ENROLLMENT:** Contact Betsy Hicks bjh246@cornell.edu or 607.391.2673
Discussion Group will meet in the Cortland area * Group meetings will have meal provided. * Other than the Dairy Profit Monitor annual fee, there is no cost to participate! * After nine months of data is compiled, the DPM annual fee will be reimbursed to the farm at the second discussion group meeting * Please reach out with any questions!

---

**Dairy Grazing Discussion Group**

Successful dairy grazing requires a high level of management. Peer-to-peer learning is especially useful for improving grazing management because it allows producers to capitalize on the experience of other grazers working within different farm contexts and management systems.

**Discussion Group Objectives**

- Improve management and utilization of pasture resources *
- Develop, implement and evaluate grazing plans for the 2020 grazing season *
- Analyze costs associated with pasture production and management *
- Track monthly milk income and feed costs during the grazing season *
- Support peer-to-peer learning

**Program Timeline**

- Meet in February 2020 to discuss grazing plans. Use the Pasture Cost Calculator to analyze pasture costs per head per day. Use Dairy Profit Monitor to track milk sales and feed costs from May 1 to Oct 31. Attend a summertime pasture walk at a participating farm.
- Meet in December 2020 to discuss grazing plans, feeding strategies, and financial outcomes.

**ELIGIBILITY:** Conventional dairy farms that graze lactating cows on pasture are eligible to participate. Farms must already practice rotational grazing, or plan to implement a rotational grazing system in 2020.

**ENROLLMENT:** Contact Mary Kate Wheeler by email at mkw87@cornell.edu or by phone at 509-294-6073 with questions or to sign up.

**COST:** There is no cost to participate in the discussion group. There is a $100 fee to enroll in the Dairy Profit Monitor for 3 months.

**FUNDING:** This program is funded by a Dairy Advancement Program (DAP) grant.
NYFVI Grant Proposal; Focus on Farm Management:
Areas of Opportunity & Excellence in Calves, Transition Cows & Cow Comfort
Proposal by: Margaret Quaassdorff (NWNY Region), Lindsay Ferlito (NNY Region), Betsy Hicks (SCNY Region), Cornell Cooperative Extension Regional Dairy Specialists

Time Frame: December 1, 2019 – May 31, 2021 (1.5 years)

Project Description: Fifteen herds (5 in each region) will work with their regional Dairy Specialist to complete an assessment of three key management areas (calves & heifers, transition cows, and cow comfort & lameness). Each herd will identify their Area of Excellence (AOE) and Area of Opportunity (AOO) and form an action plan based on their AOO. Six months after the action plan has been created, the farm will receive a re-assessment of the management areas. Each herd will share a success story or highlight one of the changes made to be shared to a broader audience. One workshop will be hosted by a herd in each region to share their AOE or their path taken to improve their AOO at the end of the project.

Commitment: Five contact points consisting of: Contact Point 1 – Reviewing project and assessment of management areas (~1 hour) Contact Point 2 – On-farm assessment (0.5 hour meeting, followed by assessment by team) Contact Point 3 – Report delivery of assessment, comparison to 15 herd benchmarks, formulation of an action plan to work on an area of opportunity (~2 hours) Contact Point 4 – Re-assessment (6 months after report delivery, 0.5 hour meeting) Contact Point 5 – Delivery of re-assessment report, documentation of changes and success stories (1.5 hours)

Questions? Contact your local CCE Regional Dairy Specialist, Betsy Hicks @ bjh246@cornell.edu

Lameness, Injuries and Lying Behavior — Continued from page 9

Figure 2. Stall Size Recommendations

<table>
<thead>
<tr>
<th>Stall Measure</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stall width</td>
<td>&gt; 2x cow hip width</td>
</tr>
<tr>
<td>Stall length</td>
<td>&gt; 1.2x cow rump height</td>
</tr>
<tr>
<td>Tie rail height</td>
<td>&gt; 0.8x cow rump height</td>
</tr>
<tr>
<td>Tie rail position</td>
<td>&gt; 13 inches from the inside of manger curb at head of stall</td>
</tr>
<tr>
<td>Chain length</td>
<td>&gt; the tie rail height minus 8 inches</td>
</tr>
<tr>
<td>Manger curb height</td>
<td>&lt; 8 inches</td>
</tr>
<tr>
<td>Space over water</td>
<td>&gt; 30 inches</td>
</tr>
</tbody>
</table>

Figure 3. Herd-Level Lameness and Injury Prevalence and Lying Behavior

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-Stall Lameness – Overall (%)</td>
<td>16.1</td>
<td>11.2</td>
<td>0.0</td>
<td>42.5</td>
</tr>
<tr>
<td>Moving Lameness – Mild (%)</td>
<td>17.9</td>
<td>10.6</td>
<td>2.5</td>
<td>40.0</td>
</tr>
<tr>
<td>Moving Lameness – Severe (%)</td>
<td>2.5</td>
<td>4.0</td>
<td>0.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Hock Injury – Mild (%)</td>
<td>52.5</td>
<td>22.0</td>
<td>15.4</td>
<td>92.5</td>
</tr>
<tr>
<td>Hock Injury – Severe (%)</td>
<td>7.4</td>
<td>7.3</td>
<td>0.0</td>
<td>22.5</td>
</tr>
<tr>
<td>Knee Injury – Overall (%)</td>
<td>5.9</td>
<td>6.3</td>
<td>0.0</td>
<td>22.5</td>
</tr>
<tr>
<td>Neck Injury – Mild (%)</td>
<td>17.6</td>
<td>17.0</td>
<td>0.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Neck Injury – Severe (%)</td>
<td>6.4</td>
<td>9.1</td>
<td>0.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Lying Time (h/d)</td>
<td>10.5</td>
<td>1.7</td>
<td>7.0</td>
<td>12.8</td>
</tr>
<tr>
<td>Lying Bout Frequency (bouts/d)</td>
<td>10.0</td>
<td>2.3</td>
<td>6.4</td>
<td>15.3</td>
</tr>
<tr>
<td>Bout Length (min/bout)</td>
<td>69.5</td>
<td>9.7</td>
<td>52.5</td>
<td>82.9</td>
</tr>
</tbody>
</table>
## CALENDAR OF EVENTS

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
<th>Location</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 14 - Mar 10</td>
<td>New York Certified Organic Meetings—Martin Auction Barn, 1036 NY-318, Waterloo</td>
<td>Martin Auction Barn, 1036 NY-318, Waterloo</td>
<td>10 am</td>
</tr>
<tr>
<td>Jan 15 - Feb 5</td>
<td>QuickBooks for Farmers and Growers—Cortland Career Work Center, Cortland</td>
<td>Cortland Career Work Center, Cortland</td>
<td>10 am - 12 pm</td>
</tr>
<tr>
<td>Jan 16</td>
<td>Dairy Managers Discussion Group - Reproductive Strategies with Dr. Julio Giordano</td>
<td>Cortland</td>
<td>12-3 pm</td>
</tr>
<tr>
<td>Jan 23 - Feb 27</td>
<td>Modern On-Farm Preparedness; Multiple dates at various locations</td>
<td>Multiple dates at various locations</td>
<td>11 am - 2 pm</td>
</tr>
<tr>
<td>January 24</td>
<td>Winter Crop Meeting—Clarion Inn, Ithaca</td>
<td>Clarion Inn, Ithaca</td>
<td>9 am - 3:15 pm</td>
</tr>
</tbody>
</table>

“The year end brings no greater pleasure then the opportunity to express to you season's greetings and good wishes. May your holidays and new year be filled with joy.” - Charles Dickens