Hello, Harford County!

Welcome, 2014! Now is the time of year that we traditionally think forward, make plans, and set goals for the coming year. I encourage you to take a few minutes to do just that. Write down a few goals that are SMART (specific, measureable, attainable, realistic, and time-bound). Writing them will help you formalize your thoughts and will provide you with a record of what you plan to accomplish.

Setting goals, however, is only the first step. Following through to success usually takes some hard work, determination, and communication. Whether you work your farming operation with family or employees, there's bound to be other people involved in your success. Give yourself the best chance of reaching this year's goals by following these tips to improving your communication skills.

Don't just hear: listen. Communication is a two-way street so we should expect to spend half our communication time on the receiving end. Be an active listener. Let the other person know you understand what they are saying or, if you don't, ask clarifying questions so you can understand. While you are listening, think about what the other person is saying — not about what you are going to say next.

Communicate frequently and openly. Make it a habit to talk about things often—both work-related and personal. If talking is normal and comfortable, both parties will be more likely to discuss potential problems before they turn into disagreements or arguments.

Think about non-verbal communication. Tone of voice, facial expression, and body language can say as much as words. Pay attention to non-verbal communication, and consider how others will interpret your non-verbal cues.

Best wishes to you for accomplishing all you set out to do in 2014!

Sincerely,
University of Maryland Extension will conduct a class called “Managing for Today and Tomorrow” during the winter of 2014 at four sites in Maryland and Delaware, including Harford County. Managing for Today and Tomorrow, an Annie’s Project class, is a program designed to help women become involved in the journey of transitioning the farm legacy. Special focus will be placed on the woman’s role in transition planning, which is the process of creating and implementing an overall strategy to move the farm business from one generation to the next. Topics for the session cover succession planning, estate planning, retirement planning, and business planning. Participants do not need to have completed Annie’s Project to enroll in this class; new students are welcome! The Harford County course will be six Thursday evening sessions and will be held at Harford Community College in Bel Air, MD. Class will run from 6:00 p.m. – 9:00 p.m. Thursday evenings, January 16 through February 27, 2014; no class will be held on February 6. The cost of the entire course, including meals and materials, is $60. Registration will be on a first-come, first-served basis as limited space is available. For more details and to register, visit www.extension.umd.edu/annies-project or www.2014anniesmtt.eventbrite.com. The complete syllabus for the Harford County class is available online at extension.umd.edu/annies-project/class-information/managing-today-and-tomorrow.
Central Maryland Vegetable Growers’ Meeting

Commercial vegetable growers are invited to learn about many topics connected to vegetable growing in Maryland. This meeting will serve as a recertification for Maryland Private Pesticide Applicators as well as selected Pennsylvania applicator credits. In addition, growers who attend specified presentation sessions can renew or receive the required MDA Nutrient Applicator Voucher. For more information or to register, call the Baltimore County Extension Office at 410-771-1761. Registration is $15 per person in advance and $25 at the door.

UME Annual Fruit Meeting

February 26, 2014
9:00 a.m.—3:30 p.m.
Wye Research and Education Center
Queenstown, MD

Topics for the day will include managing bacterial diseases on tree fruit, updates on invasive insect pests, research report on size controlling apple root stock, beach plum production, hop yards, meadow orchards, frost protection options, and more. Private applicator pesticide recertification credits and CCA credits will be offered. For questions about the program, please contact Mike Newell at mnewell@umd.edu or 410-827-7388.

Harford Midwinter Agronomy Meeting

Join us for the 2014 Midwinter Meeting! The day’s topics will satisfy the requirements for pesticide private applicator recertification credit and nutrient applicator voucher renewal. Registration is $10 per person in advance and $12 per person at the door. Advanced registration is strongly encouraged by January 27 as space is limited. For more information or to register, contact the Harford County Extension Office at 410-638-3255 or sbh@umd.edu.

Topics for the day will include:

• “All About the Kudzu Bug,” Dr. Bill Lamp, UMD Department of Entomology
• “Corn Seed Treatment Effects,” Dr. Cerruti Hooks, UMD Integrated Pest Management Specialist
• “Feed the Soil and the Soil Will Feed You,” Dean Cowherd, NRCS Maryland State Soil Scientist
• “Maryland’s Right-to-Farm Law,” Mae Johnson, Maryland Department of Agriculture
• “The New UMD Phosphorus Management Tool,” Dr. Josh McGrath, UMD Soil Fertility Specialist
• “Soybean Maturity Groups,” Dr. Bob Kratochvil, UMD Agronomic Crop Production Specialist
There are two schools of thought in regards to farmers and stress. The first believes that farmers are less stressed than other types of workers because of where they work – in quiet pastoral settings. The other is far more accurate: farming is one of the top ten most stressful occupations in the U.S., according to the National Institute for Occupational Safety and Health (NIOSH). There are numerous stresses that are unique to the farm environment, the most obvious being financial pressures, heavy debt, dependence on good weather and markets, fatigue, and working in extreme weather conditions. Less known stresses include lack of time for yourself, family and friends; lack of time to deal with tough problems; dealing with customers; lack of sleep; concerns about long-term effects of pesticides; undone chores at home; and the increasing complexity of equipment and products.

What is stress? Stress is a person’s reaction to an event or stimulus considered to be a challenge or threat (the stressors). People differ in how they perceive and react to stressors. An event or stimulus, which is very stressful to one person, might be considered less stressful to another. When you encounter a potential stressor, your body responds by doing more of some things and less of others. Blood circulation increases, thus increasing blood pressure and heart rate, and digestion slows down or even stops. Over time, these changes could lead to major health problems, including heart disease, high blood pressure, stroke, immune system disruption, ulcers, sleeplessness, headaches, depression, and even suicide.

Non-health-related problems also occur. When a farmer faces numerous stressors, he or she is often distracted, thus becoming more prone to errors that lead to serious or fatal accidents such as tractor rollover or entanglement. In time, the stressed person becomes physically weaker and tires more easily. Concentration is more difficult and poor management decisions are made. Under stress, most people become so involved in their own problems that they forget about everyone else. At the same time, they start to take out their frustrations on family members and friends, thus becoming a problem for everyone.

Stress has a “snowball effect”. All the problems it causes with personal health, family and work will become new problems. Without learning to control it, stress can become an endless cycle.

Some early warning signs of stress are:

⇒ Physical Symptoms of Stress
- Headaches
- Stomach problems
- Rising blood pressure
- Rapid heart rate
- Clenched teeth
- Waning sexual interest

⇒ Emotional Symptoms of Stress
- Impatience
- Frustration
- Depression
- Angry blowups
- Difficulty controlling emotions
- Low self-esteem

⇒ Behavioral/Relationship Symptoms of Stress
- Increase in smoking and/or drinking
- Trouble adapting to changing
circumstances
• Finding it hard to relax or sleep
• Communication problems
• Verbal and/or physical abuse
• Sarcastic arguments

The following lists some techniques that the farmer can use to gain control of the stressors:
1. Learn how to recognize stressors. The body gives warning signs (muscle tightening in neck or shoulder, stomach problems, changes in behavior or relationships) when the stress level is too high.
2. Reduce the pile-up of too many stressful events at one time. Plan ahead; repair/replace worn machinery; set priorities for the day, week, etc.; postpone stressful events within your control; and say no to things you don’t have time to do.
3. Don’t worry over things you cannot control. Know the difference between what you can and cannot change. Change those you can and ignore the rest.
4. Break down major problems into smaller, manageable parts.
5. Take breaks often.
6. Take care of yourself. Exercise is a great stress-reliever. Eat well and drink plenty of water.
7. Get enough sleep (unwinding before bed time will help).
8. Notice what you have accomplished rather than only what you haven’t.
9. Set realistic goals and expectations.
10. Plan time for activities that you enjoy, such as going to the movies or a sports event, reading, listening to music or visiting friends.
11. Find someone to talk to about your worries and frustrations.
12. Get help when you need it.

It is also important to recognize the unhealthy ways to de-stress. Drug, alcohol, and even tobacco use alter your perceptions. They are contributing factors in many farm accidents and the destruction of important relationships. Support is available if you need it.

Unrelieved stress is a known risk factor in many of the leading causes of premature death among adults. The farmer is particularly prone to very high levels of job-related stress. To prevent the often life-threatening effects of stress, it takes discipline and daily practice at controlling events (planning ahead), attitudes (set realistic goals) and responses (relax and take care of your body). And remember, it’s OK to ask for help!

A soil test analysis is one of the most important parts of the Nutrient Management Plan. Typical farm management leads to certain expectations from soil testing. Occasionally folks come into the office with questionable results. Perhaps you have received a soil analysis that shows a field to be high in phosphorus and are wondering if it is accurate. If the soil tests differently than expected, we are justified in questioning these results. What should be done?

First, evaluate sampling procedures:
• Were 15 to 20 plugs taken and thoroughly mixed to generate one sample?
• Was a clean plastic bucket used to collect the samples, avoiding contamination and chemical reactions?
• Were all samples taken to a depth of 8 inches?
• Were samples taken randomly throughout the management area, avoiding unusual areas like windbreaks, fence lines, wet areas, or areas near lime rock roads?
• When were the samples taken? Were there any applications to the field prior to sampling that could affect analyses results? Sampling after manure or fertilizer application, especially in no-till or pasture situations, will

 Soil Test Analysis Results: Take a Second Look

By Patricia Hoopes, Nutrient Management Advisor, UME-Harford County
make soil analyses highly variable and usually result in highly inflated soil test numbers. The rule of thumb is to wait 6 months before soil sampling.

Once soil sampling procedures are found to be accurate, then it is time to question the lab. If you believe inaccurate results are due to lab error, immediately contact the lab. In general, soil labs keep soil samples for a limited time due to space restrictions. Most labs will retest the sample upon request. Some will charge additional fees, especially if results are similar to the previous one. Ask your lab about their policy.

If you are still not satisfied, resample.

An accurate soil sample analysis is essential to ensure your Nutrient Management Plan provides the best fertilizer recommendations and the best chance for the highest yields.

References: “Soil Sampling Procedures for Nutrient Management” and “Nutrient Manager: Focus on Soil Testing and Nutrient Recommendations.” Copies are available from extension.umd.edu/anmp or from the Extension Office.

Does your operation require the use of restricted-use pesticides? If so, you need to obtain a pesticide applicator’s certification in order to buy and apply these products. If you plan to apply products to your own property only, you can obtain a private applicator certification. If you plan to apply restricted-use products for a fee or to other peoples’ property, you need a commercial applicator’s certification. Potential private applicators are invited to attend a training session at the Harford County Extension Office in March 4 from 9:00 a.m. – 11:30 a.m. A private applicator certification exam will be held at the Extension Office on March 11 at 9:00 a.m. Call our office at 410-638-3255 or e-mail sbh@umd.edu to register for the training, the exam, or both.

If you apply nutrients (manure or commercial fertilizer) to 10 or more acres located in Maryland, you are required to maintain a current nutrient applicator voucher card. A copy of your current card is now required to be included with your nutrient management plan. If your nutrient applicator voucher is expired, or if you have never had a voucher before but are required to hold one, plan to attend one of the following trainings being offered in Harford County: 1) Midwinter Meeting on February 4 (see details on page 3), or 2) Nutrient Applicator Voucher Session at the Harford County Extension Office on March 12 from 10:00 a.m. – 12:00 p.m. Please register in advance for either training by contacting the Harford County Extension Office at 410-638-3255.

If you are a certified private applicator and your certification expired on December 31, 2013, don’t worry – you have a 90-day grace period to attend a recertification training. You may attend either the Midwinter Meeting on February 4 (see page 3 for details) or an afternoon recertification session at the Harford County Extension Office on March 4 from 1:00 p.m. – 3:30 p.m. Trainings are also being offered in other counties; if you would like a listing of these dates, contact us. To register for either the Midwinter Meeting or the March 4 recertification training, contact the Harford County Extension Office at 410-638-3255 or sbh@umd.edu.
**Maryland Buyer-Grower Expo**

**January 22, 2014**

January 22, 2014—10:00 a.m. to 2:00 p.m.

Navy-Marine Corps Memorial Stadium
Annapolis, MD

The Maryland Department of Agriculture (MDA) will host a wholesale local food trade show with the purpose of providing an opportunity for Maryland growers, producers, and processors to connect with buyers from grocery store retailers, restaurants, schools, institutions, and other venues. Maryland growers, producers, and processors will be charged an exhibitor’s fee of $40. There is no fee for buyers to attend. You should attend this event if you are: a Maryland grower, producer, or processor interested in finding new markets for your products; a buyer from a grocery store, restaurant, hospital, school, or other venue looking to purchase Maryland-grown or produced products; or a service provider in agriculture or local foods (such as a food writer, etc.). To register or for more information, please visit www.marylandsbest.net. The registration deadline to be included in the 2014 Directory is January 7. For questions or help registering, contact Stone Slade at 410-841-5779 or stone.slade@maryland.gov.

**“AGsploration: the Science of MD Ag” Teacher Training**

“AGsploration: the Science of Maryland Agriculture” is a science-based agriculture literacy curriculum for middle school youth, created by University of Maryland Extension faculty. A three-time national award-winning curriculum, AGsploration consists of 22 peer-reviewed lessons that are aligned with Maryland State Department of Education learning standards for science and health. The UME AGsploration team will offer an in-service training for educators and youth programming providers who are interested in incorporating AGsploration into their teaching. Training participants will experience several hands-on lessons from the curriculum and gain confidence in teaching their students about agriculture. Participants will receive morning refreshments and a hot lunch, hard and electronic copies of the curriculum, and a kit of materials needed to teach a select group of AGsploration lessons. Registration is free but required in advance by January 6, 2014. To register online, visit extension.umd.edu/agsploration/teachers/training. For questions, please contact Sara at the Harford County Extension Office at 410-638-3255 or sbh@umd.edu.
Beginning Farmer Success Program

The Maryland Collaborative for Beginning Farmer Success provides beginning farmers with easily accessible tools and practical experience-based training on farm production, marketing, land management, business planning, and financial resources. The Collaborative features four major components for various levels of background knowledge a beginning farmer may already possess. Beginning farmers may choose to enter into the Collaborative at any of the four levels: 1) **Explore** farming options, understand the components of a successful farm operation, and make decisions about what enterprises best fit their interests; 2) **Refine** participants farm interests, understand the requirements and strategies of different farm enterprises and begin developing plans for assessing resources needed to implement a farm plan; 3) **Develop** specific farm production and business plans and obtain needed resources to begin a farm enterprise; and 4) **Implement** farm plans, start agricultural enterprises and continue as successful beginning farmers. Visit the website at www.extension.umd.edu/newfarmer.

Farm Trucking Forum

**February 3, 2014**

Cecil County, MD

Maryland Farm Bureau will host a series of Farm Trucking Forums throughout Maryland in early 2014. These will be similar to the past event that was held at Level Fire Hall. The forums will provide an opportunity to discuss issues facing farmers on rural roads and state highways and hear firsthand how the latest trucking rules and regulations can affect your business. If you have questions about IRPs, permits, tags, or weight limits, don’t miss it! The Cecil County forum will be held on February 3, but as of printing of this newsletter the location and time are still to be determined. For more information, contact Matt Teffeau, Maryland Farm Bureau, at 410-924-4525 or matt.mdfb@verizon.net.

Horses in Need of Homes

Two older Arabian-mix horses are looking for homes due to the recent unexpected death of their owner. Both horses are rideable and are located in Cecil County. If you are interested in finding out more, please contact Jean Ann Wilson at 443-504-9436.

Equine Seminar – Toxic Plants and Dental Health

Montgomery County Soil Conservation District and University of Maryland Extension, with sponsorship from MidAtlantic Farm Credit, will host an equine seminar in Montgomery County on January 21. Topics will include identifying poisonous weeds, as presented by Eddie Franceschi of Montgomery Soil Conservation District, and equine dental health, as presented by Joel T. Nupp, equine dentist. In case of inclement weather, the program will be rescheduled for January 23. To register, or for more information including rescheduling due to inclement weather, please contact Ms. Karen Walker at 301-590-2855.

January 21, 2014

7:00 p.m.—9:00 p.m.

Montgomery County Extension Office
Derwood, MD
Falling temperatures, wind and wet conditions cause a tremendous demand on the horse’s body for heat production. As environmental temperatures fall below the minimal temperature of the comfort zone, or “critical temperature,” heat production is increased by the body speeding up chemical reactions, which produce heat. The critical temperature can be used to estimate changes in a horse’s nutritional requirement relative to falling temperatures, cold winds and wet hair coats.

For each decrease in coldness of 1 degree Fahrenheit below the critical temperature, there is an increase in digestible energy requirements of 1 percent for body temperature maintenance. The best estimate of coldness is wind chill temperature, as this combines the effect of temperature and wind.

For example, a horse with a heavy winter hair coat has an estimated critical temperature of 30 degrees F. Thus, if the wind chill is 20 degrees F, the horse would have an increased energy requirement of 10 percent or 2 Mcal/day and should consume approximately 2 additional pounds of hay per day. This 1,000-pound horse should already be consuming approximately 15 pounds of hay per day and now should consume 17 pounds of hay to avoid any loss of body condition.

Wet weather combined with wind greatly increases a horse’s energy needs. A horse in 32 degree F weather, without shelter and subjected to rain and 10 to 15 miles-per-hour wind, would need to consume an additional 10 to 14 Mcal per day or a total of at least 25 pounds of feed. Some horses would not be able to consume this volume of feed in hay alone.

### Estimated Lower Critical Temperature for Horses in Moderate Body Condition

<table>
<thead>
<tr>
<th>Hair Coat</th>
<th>Lower Critical Temperature (F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet or Short</td>
<td>60</td>
</tr>
<tr>
<td>Moderate</td>
<td>50</td>
</tr>
<tr>
<td>Heavy</td>
<td>30</td>
</tr>
</tbody>
</table>

For example, a horse with a heavy winter hair coat has an estimated critical temperature of 30 degrees F. Thus, if the wind chill is 20 degrees F, the horse would have an increased energy requirement of 10 percent or 2 Mcal/day and should consume approximately 2 additional pounds of hay per day. This 1,000-pound horse should already be consuming approximately 15 pounds of hay per day and now should consume 17 pounds of hay to avoid any loss of body condition.

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### Est. Feed Energy Increase at Different Levels of Cold Below the Lower Critical Temp. of Mature Horses

<table>
<thead>
<tr>
<th>Difference in F Below Critical Temperature</th>
<th>Digestible Energy Increase (Mcas/day)*</th>
<th>Feed Intake Increase (lbs/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>30</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

*Assuming an energy density of 1.0 Mcal/lab, which is typical of many hays.

### Effect of Wing and Rain on Digest Energy Requirement for Horses at Maintenance

<table>
<thead>
<tr>
<th>Average temp. (F) and Conditions</th>
<th>Additional Mcal/day</th>
<th>Additional Feed (per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>32 10-15 mph wind</td>
<td>4-8</td>
<td>4-8 lbs hay</td>
</tr>
<tr>
<td>32 rain</td>
<td>6</td>
<td>6 lbs ha</td>
</tr>
<tr>
<td>32 Rain and wind</td>
<td>10-14*</td>
<td>10-14 lbs feed*</td>
</tr>
</tbody>
</table>

*May not be able to consume enough hay to meet requirements.

Many adult horses can maintain body condition on a complete forage diet with access to free choice trace mineralized salt. Adult horses should consume between 1.5 and 2 percent of their body weight in hay, or a 1,000-pound horse will eat 15 to 20 pounds of hay per day. Supplementation with grain is only necessary if horses have difficulty in maintaining body condition. Therefore, horses maintained in extremely cold conditions for an extended period, with minimal shelter, may need grain supplementation to meet their energy demands.

In most cases, an all-forage diet is a more desirable way to meet a horse’s elevated energy requirements. Forages contain a much higher fiber content than grains. Fiber is utilized through bacterial fermentation within the cecum and large intestine. Much more heat is produced in bacterial fiber fermentation than in digestion and absorption of nutrients within the small intestine (cereal grains).

### Winter Feeding for Horses

By Kathy Anderson, Extension Horse Specialist, University of Nebraska

This is only an excerpt; to read the full article, visit eXtension.org and search for “Winter Care for Horses.”

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Ag Notes

Harford County Newsletter

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